DOCUMENT RESUME

ED 367 571 SO 023 720

AUTHOR Byrne, Eileen M.

TITLE Women in Science and Technology: The Institutional Ecology Approach. Volume II: Statistical Annex: Sex Differentiation of Grade 12 Enrollments and of Higher Education Disciplines.

PUB DATE Dec 92

NOTE 125p.; For volumes I and III, see SO 023 719-721.

AVAILABLE FROM Eileen Byrne, Professor of Education (Policy Studies), The University of Queensland, Queensland 4072, Australia ($25).

PUB TYPE Reports - Research/Technical (143) -- Statistical Data (110)

EDRS PRICE MF01/PC05 Plus Postage.

DESCRIPTORS Course Selection (Students); *Enrollment Rate; *Females; Foreign Countries; Grade 12; Higher Education; High Schools; *Majors (Students); *Science Education; *Sciences; Social Science Research; Technical Education; *Technology

IDENTIFIERS Australia; *Women in Science and Technology in Australia

ABSTRACT

This volume is to be used in conjunction with volume I (Final Research Report) of the Women in Science and Technology in Australia (WISTA) research project. This document contains the main statistical tables of grade 12 and higher education enrollments used as the basis for the statistical element of the WISTA research report. The document is divided into two sections. The first section contains diagrams of undergraduate enrollments in 1985 at 10 universities in Australia. This section also contains diagrams of undergraduate enrollment rates during that same year in physics, mathematics, chemistry, biochemistry, computer science, microbiology, biotechnology, geology, minerals, civil engineering, mechanical engineering, electrical engineering, and chemical engineering. The second section is made up of statistical tables and includes 4 tables on institutional sex balance, 5 tables by level of course, 11 by separate disciplines and level of course, 6 by undergraduate disciplines showing year groups and honors where available, 10 tables showing those graduating in 1985 by discipline and level, and 5 tables of institutional staff profiles. The last part of the second section gives secondary school statistics including mathematics in grade 12, and separate statistics for 8 states and territories. The data were collected from a survey of 10 higher education institutions. This statistical volume relates to the report objective of producing a compilation of student and staff statistics, representing a significant sample of Australian higher education, in such a way as to answer detailed, diagnostic questions about female enrollments in different disciplines and subdisciplines and at different levels. (DK)

ED 367 571

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- [x] This document has been reproduced as received from the person or organization originating it.
- [ ] Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
EILEEN M. BYRNE
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

SP 023720

BEST COPY AVAILABLE

PREFACE

This volume should be used in conjunction with Volume I (Final Research Report) of the UQ WISTA Research Project. It contains the main statistical tables of Grade 12 and higher education enrolments used as the basis for the statistical element of the UQ WISTA Research Report. The data in this report was collected to enlighten specific hypotheses set out in the UQ WISTA Research Report, Volume I and does not, of course, represent a complete state-of-the-art survey as at the mid-1980s.

UQ WISTA

VOLUME II: STATISTICS

CONTENTS

I. **DIAGRAMS**

	Diagram
University of New South Wales: Undergraduate Enrolments in 1985	1
New South Wales Institute of Technology: Undergraduate Enrolments in 1985	2
University of Queensland: Undergraduate Enrolments in 1985	3
Queensland Institute of Technology: Undergraduate Enrolments in 1985	4
Monash University: Undergraduate Enrolments in 1985	5
Royal Melbourne Institute of Technology: Undergraduate Enrolments in 1985	6
University of Adelaide: Undergraduate Enrolments in 1985	7
South Australian Institute of Technology: Undergraduate Enrolments in 1985	8
University of Western Australia: Undergraduate Enrolments in 1985	9
Western Australian Institute of Technology: Undergraduate Enrolments in 1985	10
Physics: Undergraduate Enrolments in 1985	11
Mathematics: Undergraduate Enrolments in 1985 ..	12
Chemistry: Undergraduate Enrolments in 1985 ...	13
Biochemistry: Undergraduate Enrolments in 1985	14
Computer Science: Undergraduate Enrolments in 1985	15
Microbiology: Undergraduate Enrolments in 1985	16

Diagram

Biotechnology: Undergraduate Enrolments in 1985 17

Geology: Undergraduate Enrolments in 1985 18

Minerals: Undergraduate Enrolments in 1985 19

Civil Engineering: Undergraduate Enrolments in 1985 20

Mechanical Engineering: Undergraduate Enrolments in 1985 21

Electrical Engineering: Undergraduate Enrolments in 1985 22

Chemical Engineering: Undergraduate Enrolments in 1985 23

II. STATISTICAL TABLES

Table

Institutional Sex-Balance

All students by sex and by institution 1

All students by sex and type of institution 2

All undergraduate students by sex and institution 3

All postgraduate students by sex and institution 4

By Level of Course

All students by sex and level of course or study - University of New South Wales and New South Wales Institute of Technology ..... 5(a)

All students by sex and level of course or study - University of Queensland and Queensland Institute of Technology ..... 5(b)

All students by sex and level of course or study - Monash University and Royal Melbourne Institute of Technology ..... 5(c)

All students by sex and level of course or study - University of Adelaide and South Australian Institute of Technology ..... 5(d)

Table

All students by sex and level of course or study - University of Western Australia and Western Australian Institute of Technology ..... 5(e)

By Separate Disciplines and Level of Course

All student enrolments in survey disciplines - University of New South Wales ..... 6(a)

All student enrolments in survey disciplines - New South Wales Institute of Technology ..... 6(b)

All student enrolments in survey disciplines - University of Queensland ..... 6(c)

All student enrolments in survey disciplines - Queensland Institute of Technology ..... 6(d)

All student enrolments in survey disciplines - Monash University ..... 6(e)

All student enrolments in survey disciplines - Royal Melbourne Institute of Technology ..... 6(f)

All undergraduate student enrolments in survey disciplines - University of Adelaide ..... 6(g)(i)

All postgraduate student enrolments in survey disciplines - University of Adelaide ..... 6(g)(ii)

All postgraduate student enrolments in survey disciplines - South Australian Institute of Technology ..... 6(h)

All student enrolments in survey disciplines - University of Western Australia ..... 6(k)

All student enrolments in survey disciplines - Western Australian Institute of Technology ..... 6(l)

By Undergraduate Disciplines Showing Year Groups and Honours (where available

Undergraduate enrolments in survey disciplines by year groups and Honours - University of New South Wales ..... 7(a)

Undergraduate enrolments in survey disciplines by year groups and Honours - New South Wales Institute of Technology ..... 7(b)

Undergraduate enrolments in survey disciplines by year groups and Honours - Queensland Institute of Technology ..... 7(c)

Table

Undergraduate enrolments in survey disciplines by year groups and Honours - Monash University . 7(d)

Undergraduate enrolments in survey disciplines by year groups and Honours - Royal Melbourne Institute of Technology ..... 7(e)

Undergraduate enrolments in survey disciplines by year groups and Honours - South Australian Institute of Technology ..... 7(f)

Graduating 1985 by Discipline and Level

Students graduating by sex and level 1985 - University of New South Wales (maths and science) ..... 8(aa)

Students graduating by sex and level 1985 - University of New South Wales (engineering and surveying) ..... 8(ab)

Students graduating by sex and level 1985 - New South Wales Institute of Technology ..... 8(b)

Students graduating by sex and level 1985 - University of Queensland ..... 8(c)

Students graduating by sex and level 1985 - Queensland Institute of Technology ..... 8(d)

Students graduating by sex and level 1985 - Monash University ..... 8(e)

Students graduating by sex and level 1985 - Royal Melbourne Institute of Technology ..... 8(f)

Students graduating by sex and level 1985 - University of Adelaide ..... 8(g)

Students graduating by sex and level 1985 - South Australian Institute of Technology ..... 8(h)

Students graduating by sex and level 1985 - University of Western Australia ..... 8(k)

Institutional Staff Profiles

Staff profile - all academic staff in the institution by sex and level - University of New South Wales and New South Wales Institute of Technology ..... 9(a)

Staff profile - all academic staff in the institution by sex and level - University of Queensland and Queensland Institute of Technology ..... 9(b)

Staff profile - all academic staff in the institution by sex and level - Monash University and Royal Melbourne Institute of Technology .... 9(c)

Staff profile - all academic staff in the institution by sex and level - University of Adelaide and South Australian Institute of Technology ..... 9(d)

Staff profile - all academic staff in the institution by sex and level - University of Western Australia and Western Australian Institute of Technology ..... 9(e)

Secondary School Statistics

Mathematics - Grade 12, 1985 ..... 10(a)

New South Wales - Candidates for Higher School Certificate: Maths & Science: 1985 ..... 10(b)

Queensland - Percentage of Boys & Girls taking Core Subjects at Grade 12 - 1980, 1986, 1988 ..... 10(c)

Victoria - Grade 12 Higher School Certificate Candidates, Group 1 Subjects, 1985 ..... 10(d)

South Australia - Candidates: Maths & Science, 1985 ..... 10(e)

Western Australia - Certificate of Secondary Education Students (Year 12 only) Maths & Science, 1985 ..... 10(f)

Tasmania - Grade 12 Candidates for Higher School Certificate: Maths & Science, 1985 ..... 10(g)

Australian Capital Territory - TES Qualified Candidates taking Selected Subjects, 1985 ..... 10(h)

Australian Capital Territory - Grade 12 Candidates, 1985: Mathematics ..... 10(k)

1. Background to the data

1.1 The statistics in this volume were collected as part of a several-dimensional study of factors which hinder or help, women's access to and progression in, scientific and technological disciplines: the UQ WISTA (Women in Science and Technology in Australia) Project. One strand of the research involved a survey of ten higher education institutions, from whom the data in this statistical Report were collected.

The Sample Survey

1.2 The field work element of developing a model of institutional ecology, of statistical analysis of disciplines, and of reexamination of the ten core factors of influence used as part of the theoretical framework, has been carried out in ten Australian higher education institutions: five Universities and five Institutes of Technology. These were selected to meet a variety of criteria. The sample includes most of the principal providers of the country's scientific and technological workforce at tertiary level, and a representative sample from each of the five main States and urban population centres. Selection was moderated by the need to balance the sample between institutions with different provision as between Faculties of Arts, Social Sciences, Humanities, Science and Technology, Engineering, and institutions with different reputations for traditional approaches or for innovation and change. The sample also included institutions at different points of development in relation to the existence of some degree of formal discussion, debate or policy on the status of women, and on affirmative action in science and technology.

1.3 This gave us a sample in 1985 and 1986 in five of Australia's seven capital cities as follows:

Name	City	State
University of New South Wales	Sydney	NSW
New South Wales Institute of Technology (NSWIT)	Sydney	NSW
University of Queensland	Brisbane	QLD
Queensland Institute of Technology (QIT)	Brisbane	QLD
Monash University	Melbourne	VIC
Royal Melbourne Institute of Technology (RMIT)	Melbourne	VIC
University of Adelaide	Adelaide	SA

South Australian Institute of Technology (SAIT)	Adelaide	SA
University of Western Australia	Perth	WA
Western Australian Institute of Technology (WAIT)	Perth	WA

The original design included only eight sample institutions because of limited initial resources, and the 1985 fieldwork was based on these. At the request of the Commonwealth Tertiary Education Commission (CTEC) we added the two Western Australian institutions in 1986.

1.4 Since the 1985 and 1986 fieldwork, a major reorganisation of higher education in Australia has taken place, and all of the Institutes have been redesignated as Universities, mostly Universities of Technology. For the purpose of all UQ WISTA reports and analyses, however, we refer to them by their Institute designations and titles, not only because that was their status at the time, but because part of our argument about the impact of institutional ecology is precisely that there are a number of differences which emerge as between the Universities and the Institutes **as such**, because of their different history and cultural environments; and their different Faculty and degree patterns.

1.5 It should be made clear at this stage, however, that the policy review survey of ten higher education institutions did not involve "case studies" as such. There were three levels of data collection from the survey institutions with three purposes (outlined in the main report [Vol.1]), of which one was:

> ***to produce a compilation of student and staff statistics, representing a significant sample of Australian higher education, in such a way as to answer detailed, diagnostic questions about female enrolments in different disciplines and subdisciplines and at different levels.***

This statistical volume relates only to this objective.

1.6 The institutional sample is a significant one. If we express the total number of students in engineering and science in the five Universities, for example, as a percentage of all Australian engineering and science students, they are 58.4 per cent and 36.4 per cent respectively of the total. The five Institutes of Technology in turn account for 50.4 per cent of relevant College of Advanced Education students; that is, they are 59.5 per cent of engineering students and 44.3 per cent of applied science students at the relevant level in the CAE sector.

A Statistical Data-Base

1.7 We wished to set our research review of existing theory against a more diagnostic analysis of Australian data on the patterns of female enrolments and progression. This meant collecting data about staff and students subdivided not only by sex, but also to show

(i) ***institutional*** differences,

(ii) differences between ***disciplines*** and subdisciplines both between and within institutions, and

(iii) differences between ***levels*** of study in each of these.

1.8 In Australia, as in America, institutions vary quite remarkably in the extent to which they succeed (or fail) in recruiting women to or retaining them in, the same discipline. Published Australian statistical analyses so far have concentrated on figures by **Faculty** (Applied Sciences, Arts, Medicine etc), which is unhelpful for qualitative analysis. Firstly, the basis for inclusion or exclusion in Faculties has no commonality. In one University, computing is located in Science, in another in Arts with mathematics (or both). Faculties of Medicine may include physiotherapy or pharmacy. In looking at male-dominated and female-dominated areas in 1984, we found that neither the published analyses from the Commonwealth Tertiary Education Commission nor those from the Australian Bureau of Statistics provided a breakdown which answered simple questions like:

(i) *How many women (and what proportion do they form) are actually studying physics, chemistry, computing, or mechanical engineering as distinct from materials or ceramic engineering?*

(ii) *How many (what proportion of) women are in which level in each discipline?*

(iii) *How many drop out, go on, etc? Are there different consistent patterns between disciplines?*

One first order question was clearly whether there is a direct relationship (and if so, what) between different clusters of our ten factors of influence on the one hand, and the patterns of female enrolments in different disciplines on the other. To answer this, we clearly needed more detailed statistical analyses of the separate disciplines than could be supplied by the generalised Faculty enrolments.

1.9 Moreover, our theory of institutional ecology was based on a hypothesis that influences on women's perceptions of sexnormality or traditionality (which strengthen or weaken vocational and aspiration choice), include both the overall institutional sex-balance in the student body and in staffing, and the sex-balance in different disciplines. One essential task was therefore to collect statistics which would show where women students were (or were not) enrolled in terms of discipline, level and programme. What were in fact their rates of access, progression, achievement in each of the disciplines? Were our hypotheses correct, that the same discipline would recruit differently in different institutions for structural, environmental or other reasons? Were progression rates different in the same institution, different for cognate disciplines, and why?

1.10 In 1985, institutions were sent a standard proforma setting out the figures we needed. We asked for the breakdown of male and female students for each level, and for the institution as a whole. This proved relatively easy. We then asked also for the number of women and men students studying in each of the survey disciplines which we had designated for each institution, and for the study as a whole. It proved, by contrast, much more difficult to achieve a common definition of what was a discipline, and a common agreement on how to define (for the purpose of this study), say, a maths student; when did one count chemistry or physics as such and when as a component of, say, engineering?

1.11 Since we were hypothesising that one influence on the cultural environment of the institution was the proportion to which women were a critical mass of the male-dominated whole, it was also necessary to look at staffing profiles. We therefore obtained staffing figures for the institutions as a whole to show the overall sex-balance and for each discipline.

Statistical Profile

Overall male: female student balance in institution	⟹	Influences the cultural environment and therefore the overall institutional ecology
Female staff as proportion of the whole staff	⟹	Related to critical mass, role-modelling, mentorship, overall institutional ecology, and male or female attribution of discipline
Student data by sex, level and type (undergraduate, coursework Masters, research Masters, Doctoral) for institution as a whole and for each discipline	⟹	Related to critical mass, role-modelling discipline ecology, attribution of disciplines as male or female, and image

1.12 The base year for the collection of student and staff statistics was the year 1985, as at 30 April 1985. Because in Australia the academic year runs from February to November (unlike Europe and America), an April date represents a midpoint in the first semester, by which the preliminary dropouts or transfers will have taken place but before any significant attrition could be expected. The figures thus represent a realistic annual average.

1.13 For **student** statistics, we asked institutions to supply exactly parallel figures for 1986, which were collated and matched for 1985, discipline by discipline and level by level.

1.14 In relation to **staff** statistics, our preliminary analysis provided a *prima facie* case for **rejecting** the current received wisdom that the mere presence of female staff as potential role models will as such increase female enrolments, as unsupported by the data. We therefore asked for staffing figures for 1985, 1986 and 1987 to complete our discipline profiles.

1.15 The study is about science and technology, and in our preliminary discussions with Registrars, Deputy Vice-Chancellors, Deans etc in 1985, we made it clear we were

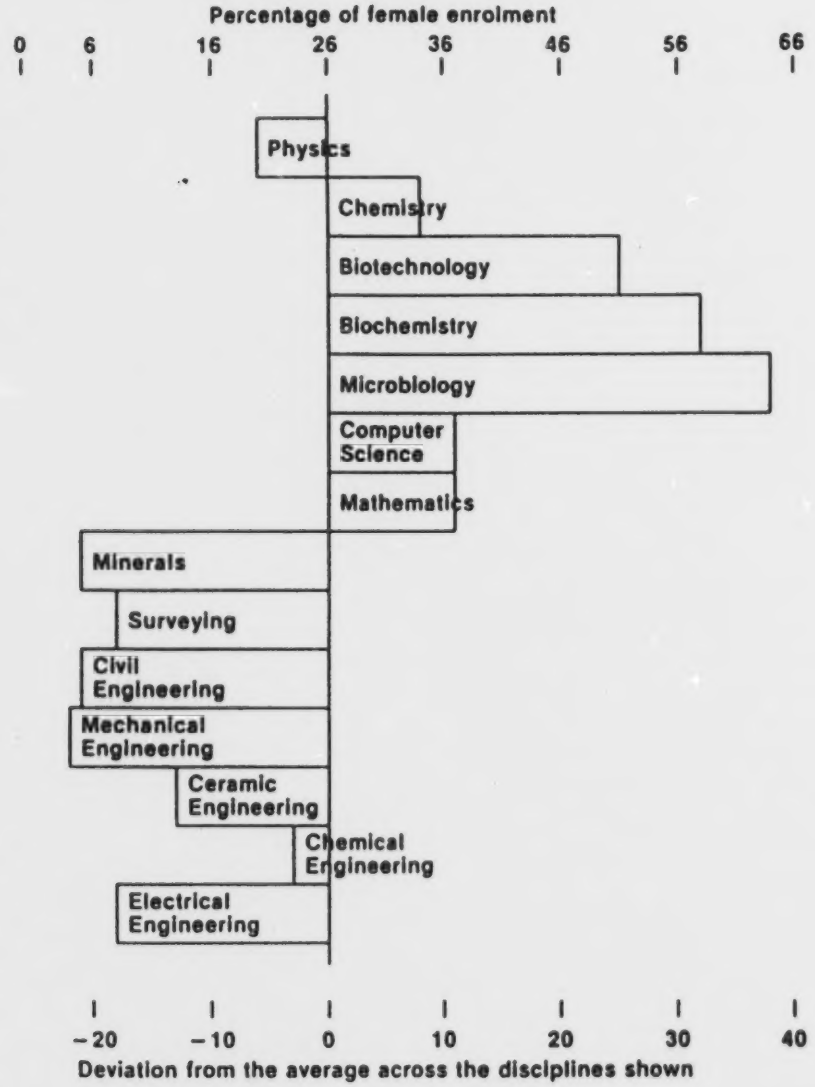
concentrating on students who, whatever the balance of individual *subjects* being studied, were expected to graduate with a degree in science and/or technology. That is, we were not interested in arts or commerce students studying one subject or unit of maths, computing or geology merely for interest.

1.16 It had been hoped that we could arrive at a common definition across the ten institutions. We succeeded in reaching a common agreement with all ten institutions that students from medicine, agriculture, veterinary studies and paramedical areas would be excluded from the survey altogether and from the figures for foundation subjects like physics and chemistry. Similarly, we asked that the returns for these subjects should exclude engineering students who take these subjects as part of a structured course.

1.17 The statistical tables were constructed from raw data supplied specifically for the UQ WISTA Policy Review project by each institution, providing as universal a presentation as possible. The tables were then sent back to the institutions for checking and for appropriate further footnoting. Amended tables were then sent back to institutions for final vetting. At each stage, amendments to the original figures were made by institutions for one discipline or level or another. This time-consuming process was essential at every stage both to ensure accuracy and to eliminate any potential ambiguity of presentation. The principal differences of approach and definition have arisen as between those institutions whose degrees are more free-floating and composed of the most flexible choice or option systems, and those institutions with more structured degrees with stronger groups of specialisms or routes defined from the first year onward. Registrars were asked to ensure that Deans and Heads of Schools had the chance to comment on the draft tables at the stage at which, in 1986, the full set of statistical summaries for 1985 were available for each discipline or level and for each institution.

In 1987, the same process was repeated in respect of 1986 parallel data which were checked out by the institutions at the stage of compiling summary and comparative data.

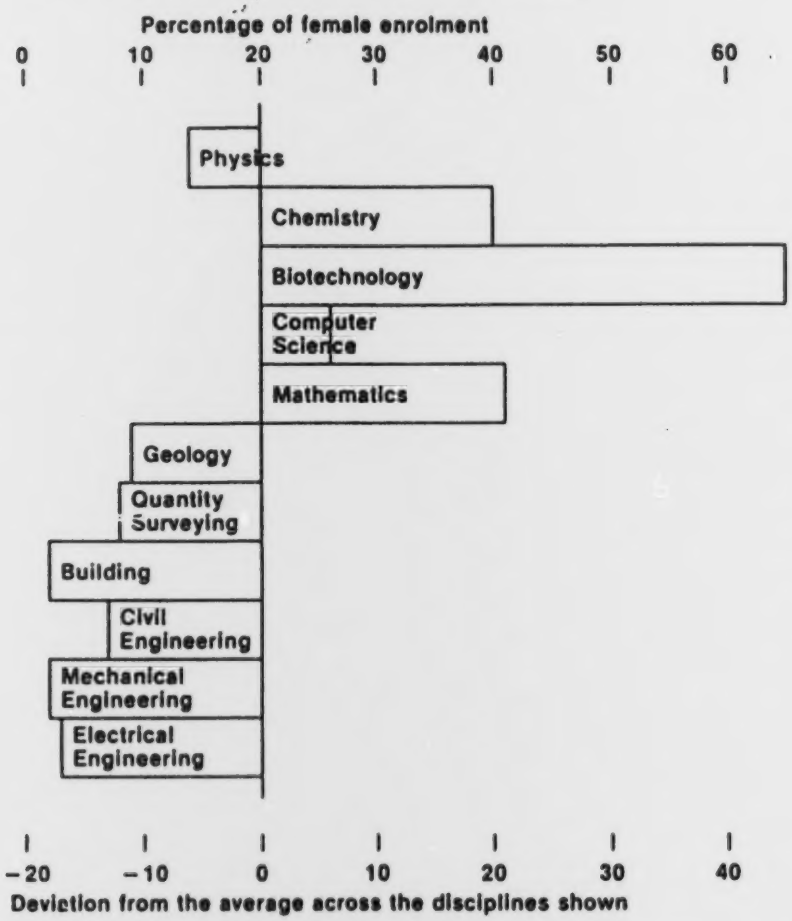
WISTA Diagram 1
University of New South Wales
Undergraduate enrolments in 1985



Notes:

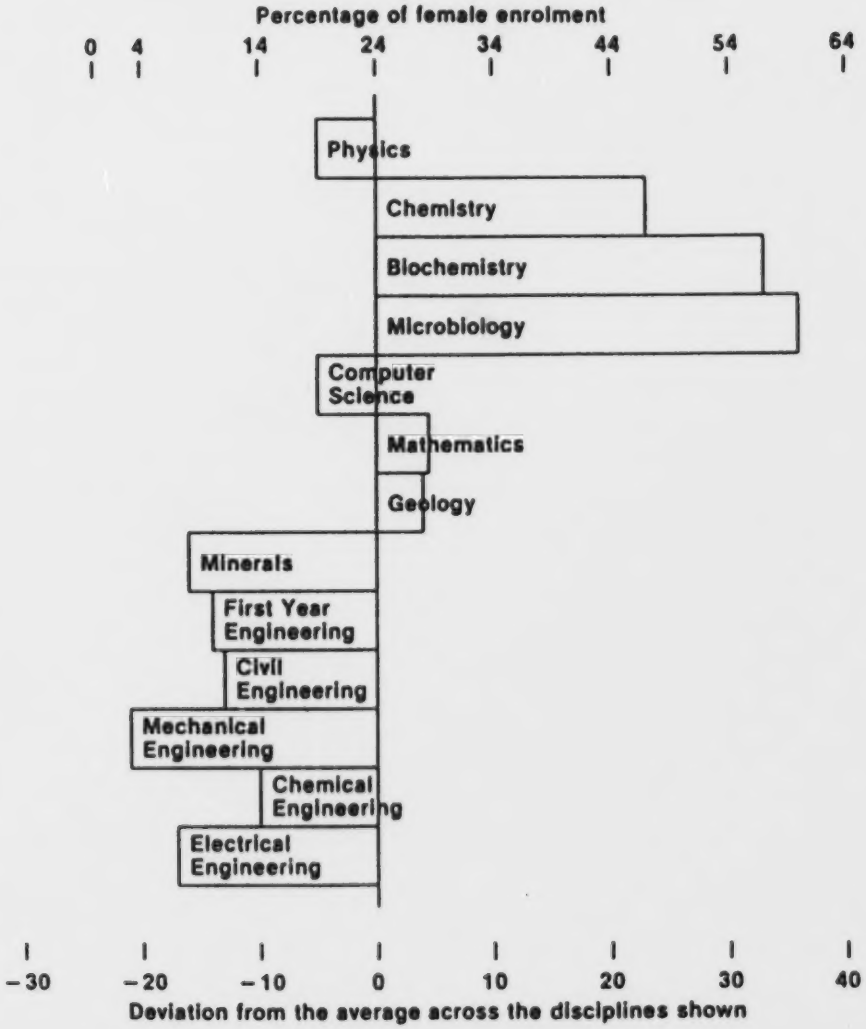
1. *Minerals* includes "Mineral Procesing", "Metallurgy" and "Mining Engineering".
2. *Mechanical Engineering* includes "Mechanical and Industrial Engineering".
3. *Chemical Engineering* includes "Chemical Engineering and Industrial Chemistry".
4. *Electrical Engineering* includes "Electrical Engineering and Computer Science".

WISTA Diagram 2
New South Wales Institute of Technology
Undergraduate enrolments in 1985



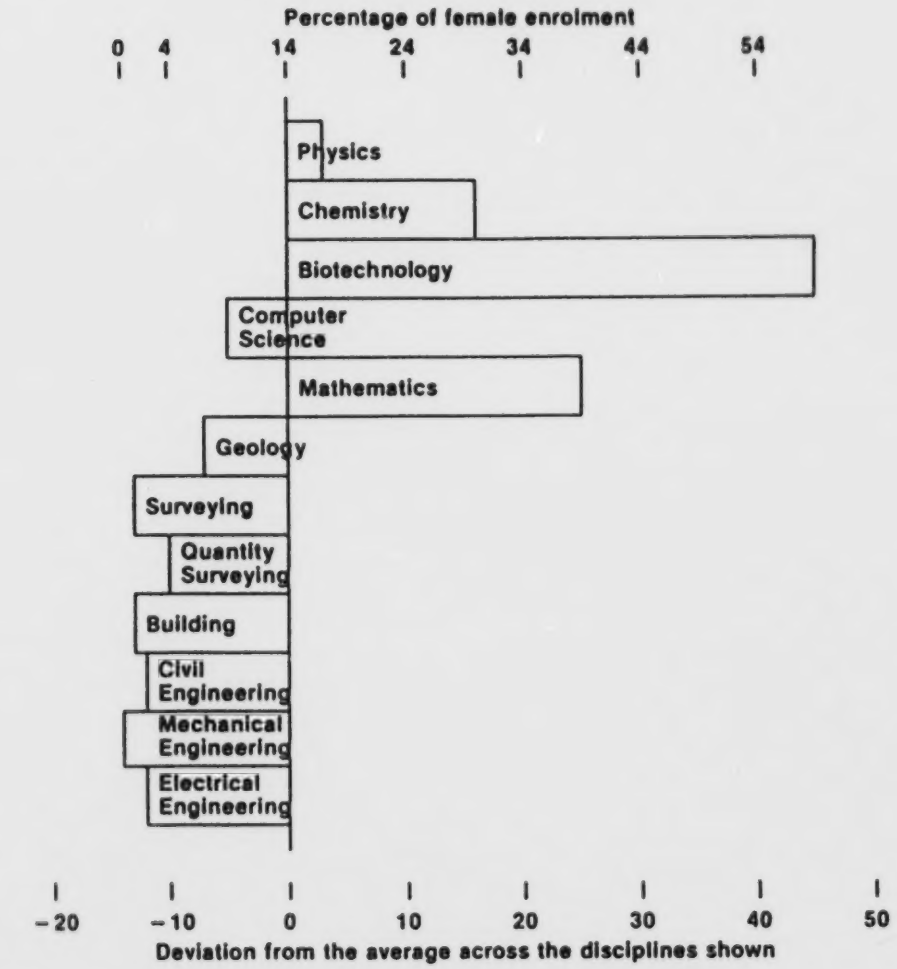
Notes: 1. *Biotechnology* includes "Biology", "Biotechnology", and "Biomedical Science".

WISTA
Diagram 3
University of Queensland
Undergraduate enrolments in 1985



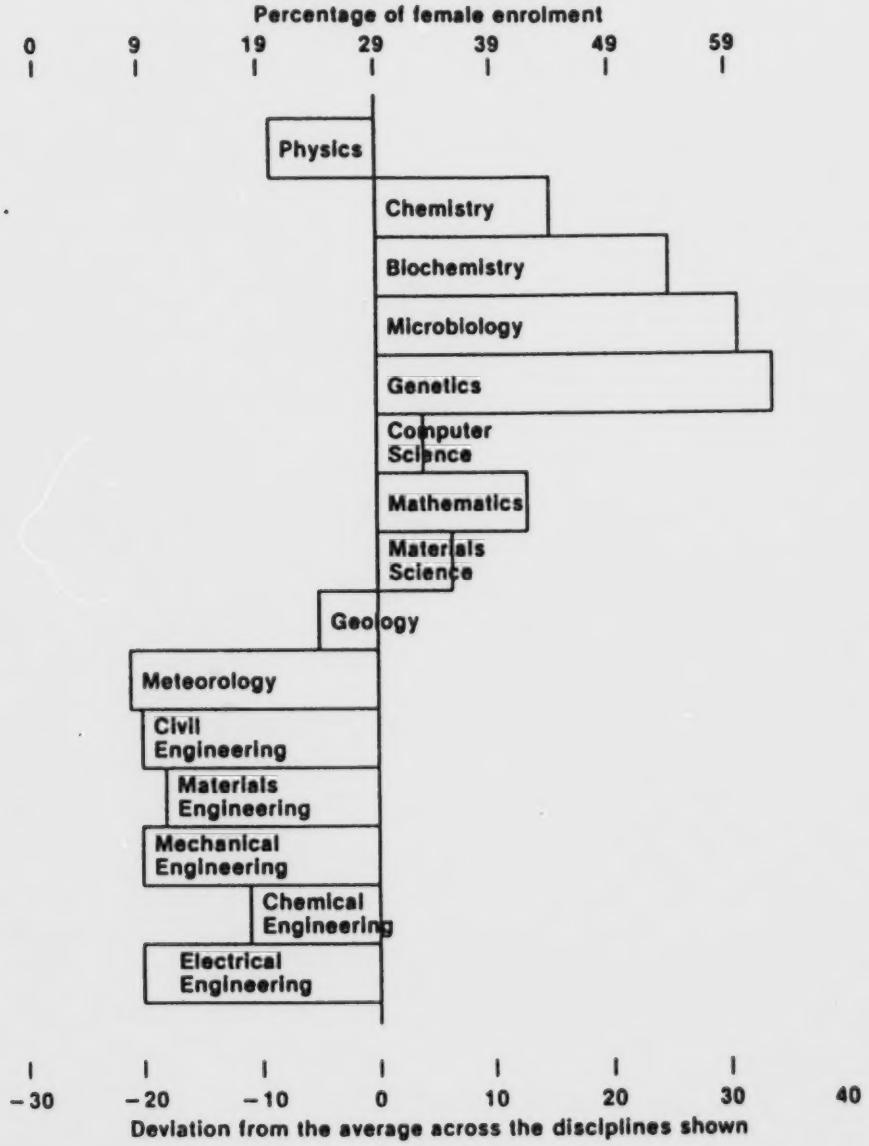
Notes: 1. *Geology* includes "Geology and Mineralogy".
2. *Minerals* includes "Mining and Metallurgical Engineering".

WISTA
Diagram 4
Queensland Institute of Technology
Undergraduate enrolments in 1985

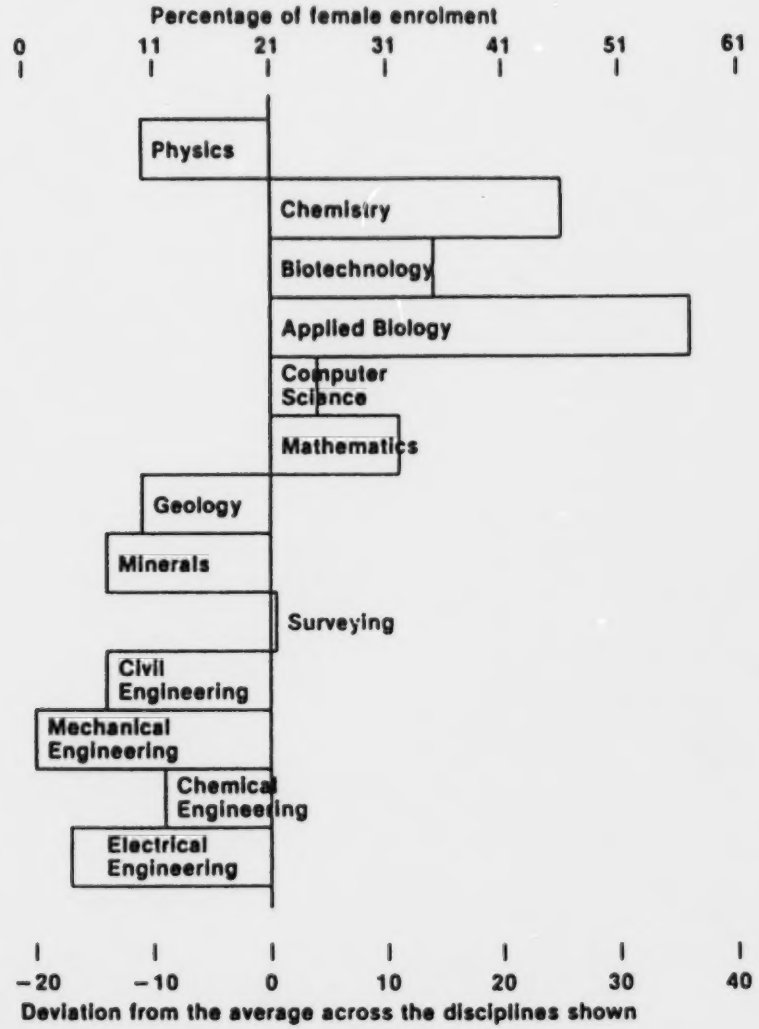


Notes: 1. *Biotechnology* includes "Biochemistry, Microbiology and Physiology".
2. *Electrical Engineering* includes "Electrical Engineering" and "Electric Systems Engineering/Computing".

WISTA
Diagram 5
Monash University
Undergraduate enrolments in 1985

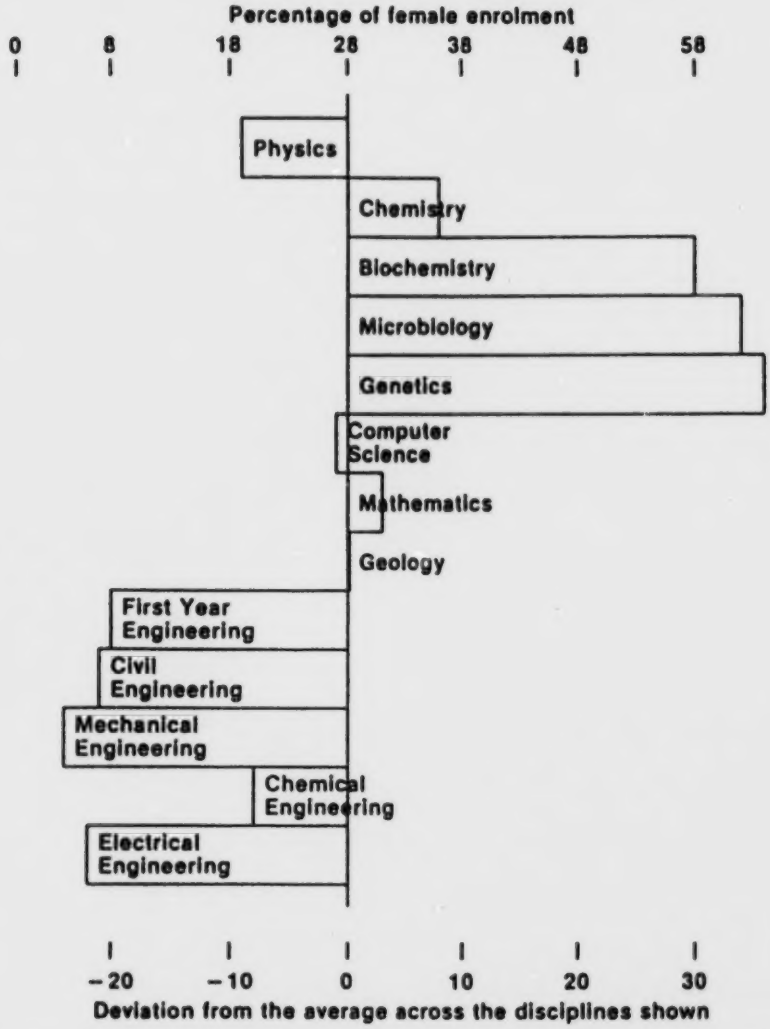


WISTA Diagram 6
Royal Melbourne Institute of Technology
Undergraduate enrolments in 1985



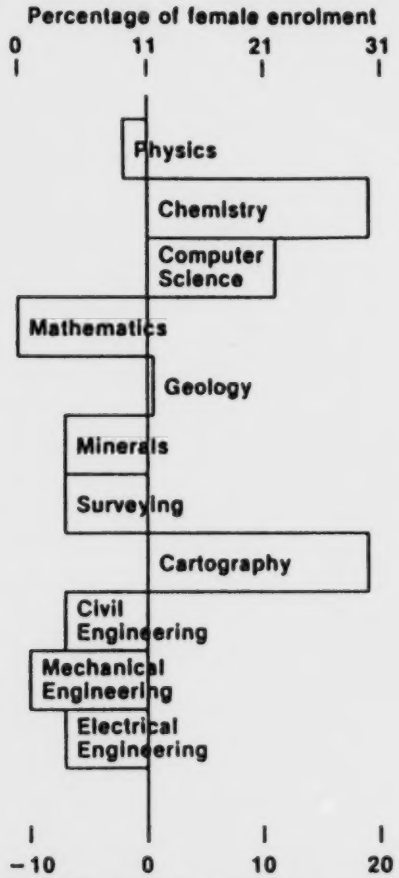
Notes:
1. ***Computer Science*** includes "Computing".
2. ***Geology*** includes "Geology and Geological Engineering".
3. ***Minerals*** includes "metallurgy and Mining".
4. ***Civil Engineering*** includes "Civil and Aeronautical Engineering".
5. ***Mechanical Engineering*** includes "Mechanical and Production Engineering".
6. ***Electrical Engineering*** includes "Electrical Engineering", "Faculty of Engineering — Systems Engineering" and "Communications and Electronic Engineering".

WISTA
Diagram 7
University of Adelaide
Undergraduate enrolments in 1985



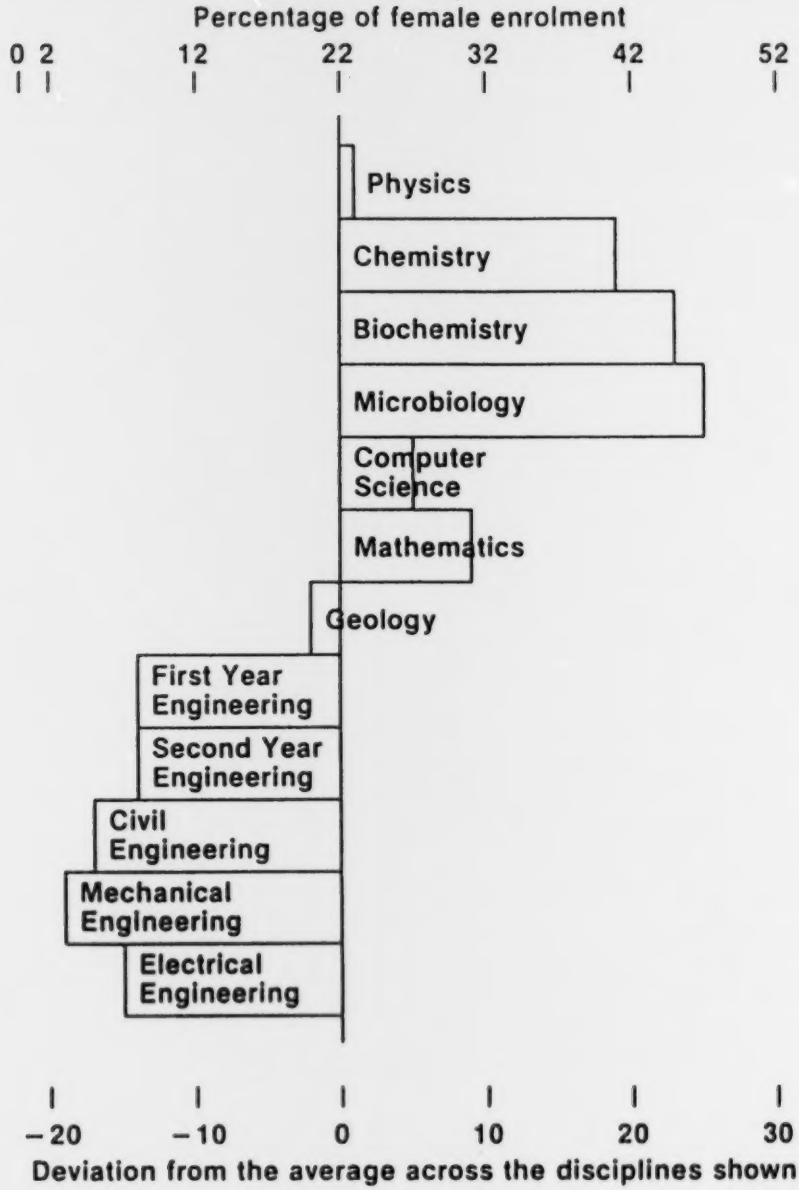
Notes:
1. *Chemistry* includes "Chemistry" and "Organic, Physical and Inorganic Chemistry".
2. *Geology* includes "Geology and Geophysics".
3. *Electrical Engineering* includes "Electrical and Electronic Engineering".

WISTA Diagram 8
South Australian Institute of Technology
Undergraduate enrolments in 1985

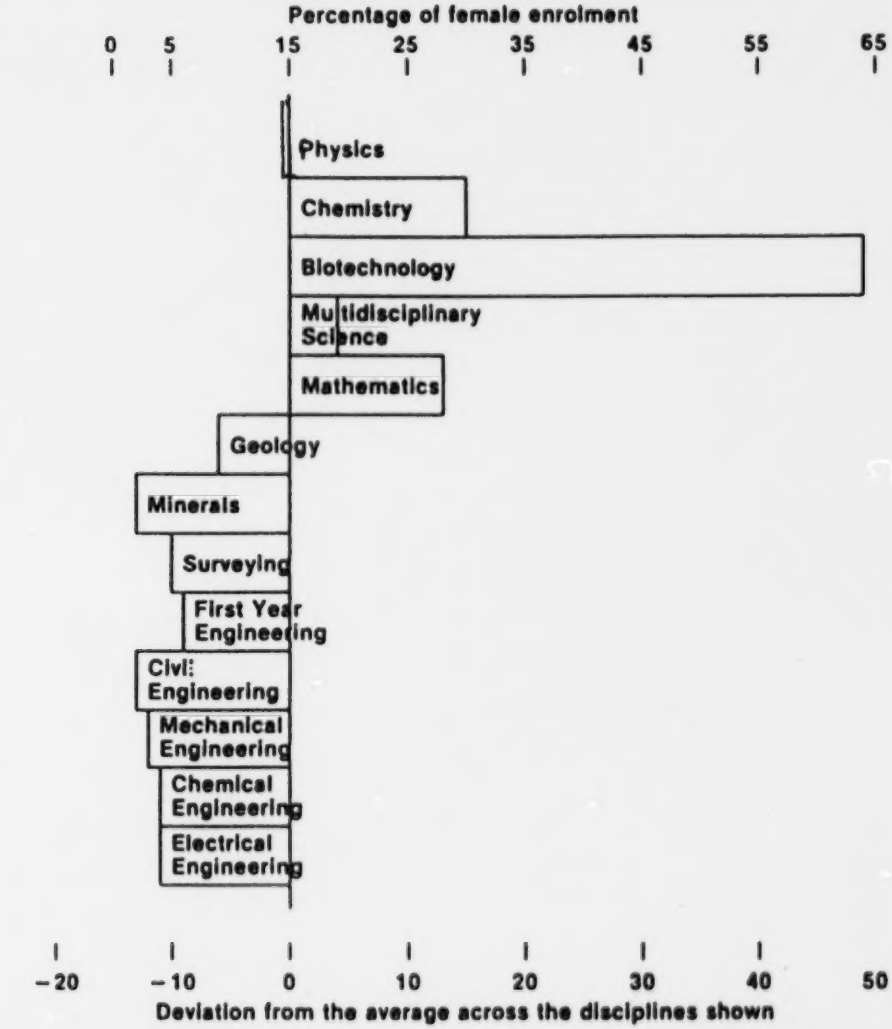


Notes:
1. *Chemistry* includes "Chemical Technology".
2. *Mathematics* includes "Mathematics" and "Mathematics and Computing".
3. *Computer Science* includes "Computing".
4. *Geology* includes "Applied Geology".
5. *Minerals* includes "Mining and Metallurgy".
6. *Electrical Engineering* includes "Electrical Engineering" and "Electronic Engineering".

WISTA
Diagram 9
University of Western Australia
Undergraduate enrolments in 1985

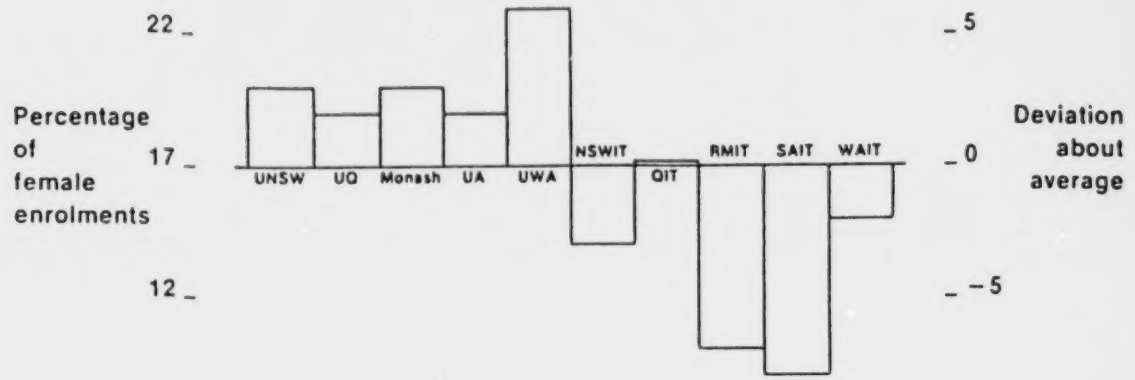


WISTA Diagram 10
Western Australian Institute of Technology
Undergraduate enrolments in 1985



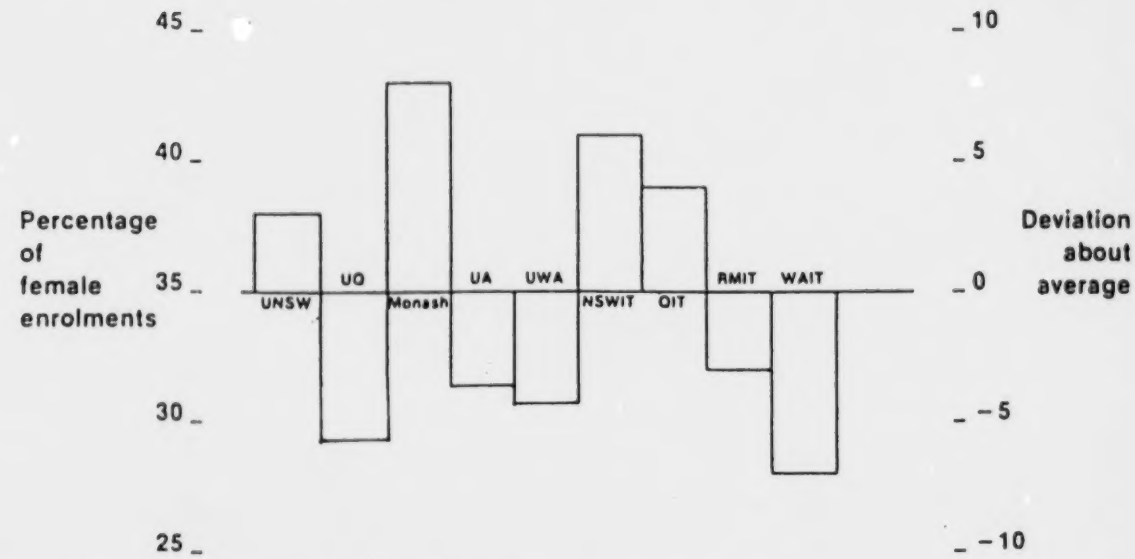
Notes:
1. *Geology* includes "Geology and Geophysics" and "Mining Geology".
2. *Minerals* includes "Minerals Exploration", "Metallurgy", "Mining and Minerals Engineering".
3. *Surveying* includes "Surveying and Mapping".
4. *Civil Engineering* includes "Building Construction and Civil Engineering".
5. *Electrical Engineering* includes "Electrical Engineering" and "Electronic and Computer Engineering".

WISTA Diagram 11
Physics Undergraduate Enrolments in 1985



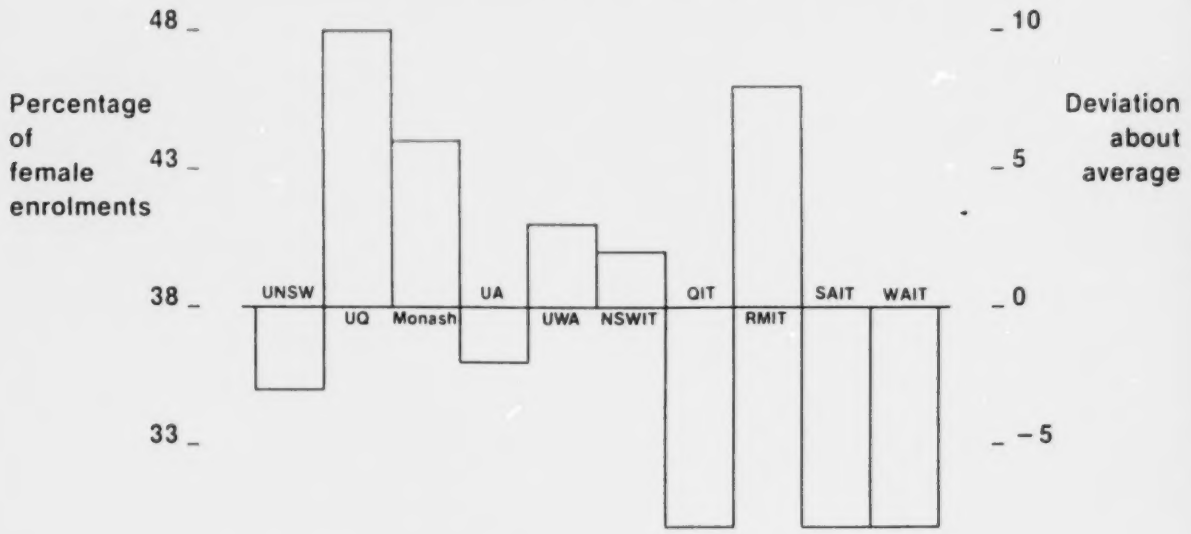
Notes: 1. This diagram is based on tables 6(a) to 6(l).

WISTA Diagram 12
Mathematics Undergraduate Enrolments in 1985



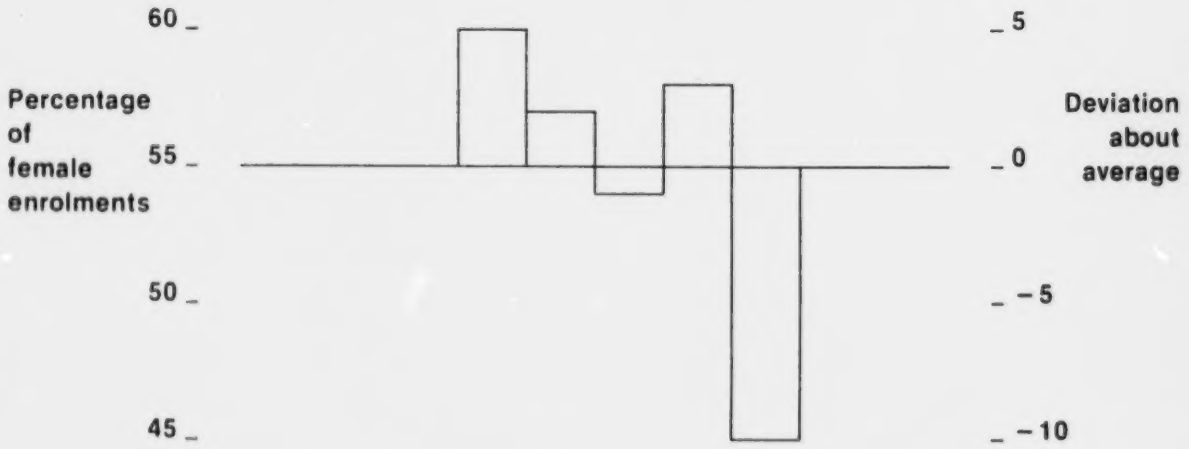
Notes: 1. This diagram is based on tables 6(a) to 6(l).

WISTA Diagram 13
Chemistry Undergraduate Enrolments in 1985



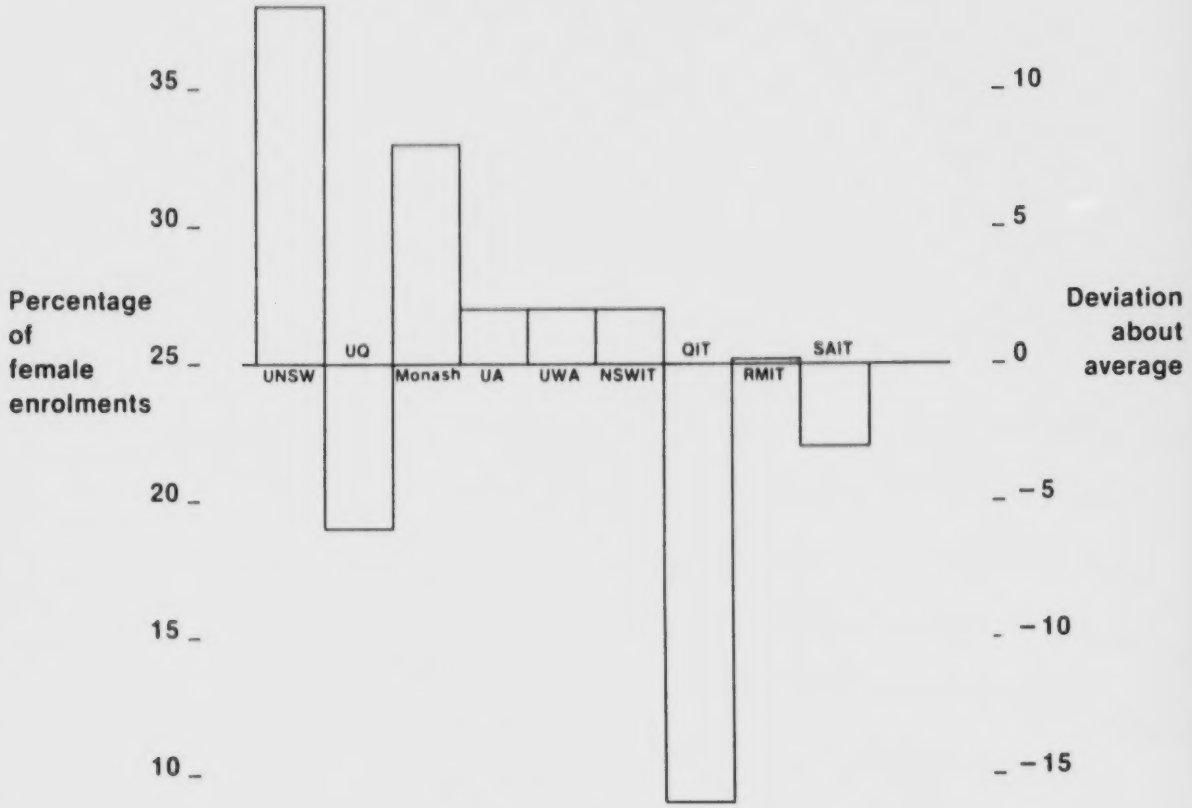
Notes: 1. This diagram is based on tables 6(a) to 6(l).

WISTA Diagram 14
Biochemistry Undergraduate Enrolments in 1985



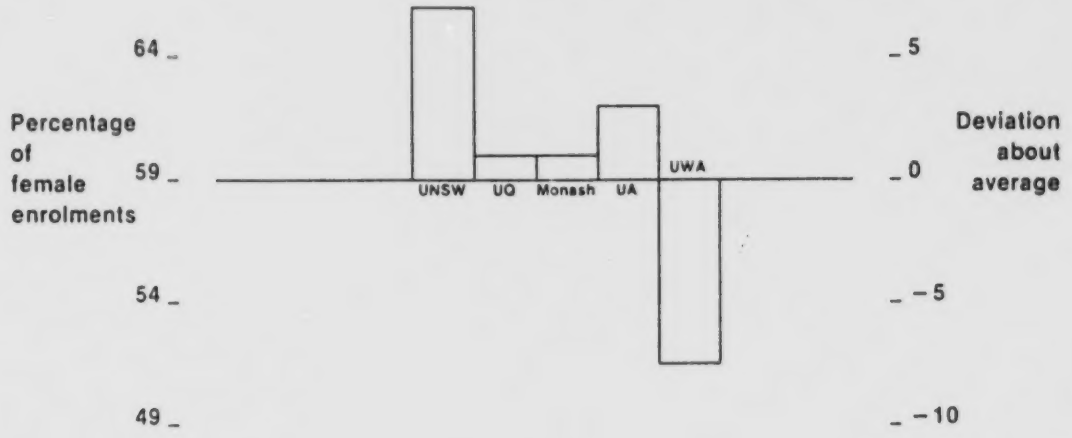
Notes: 1. This diagram is based on tables 6(a) to 6(l).

WISTA
Diagram 15
Computer Science
Undergraduate Enrolments in 1985



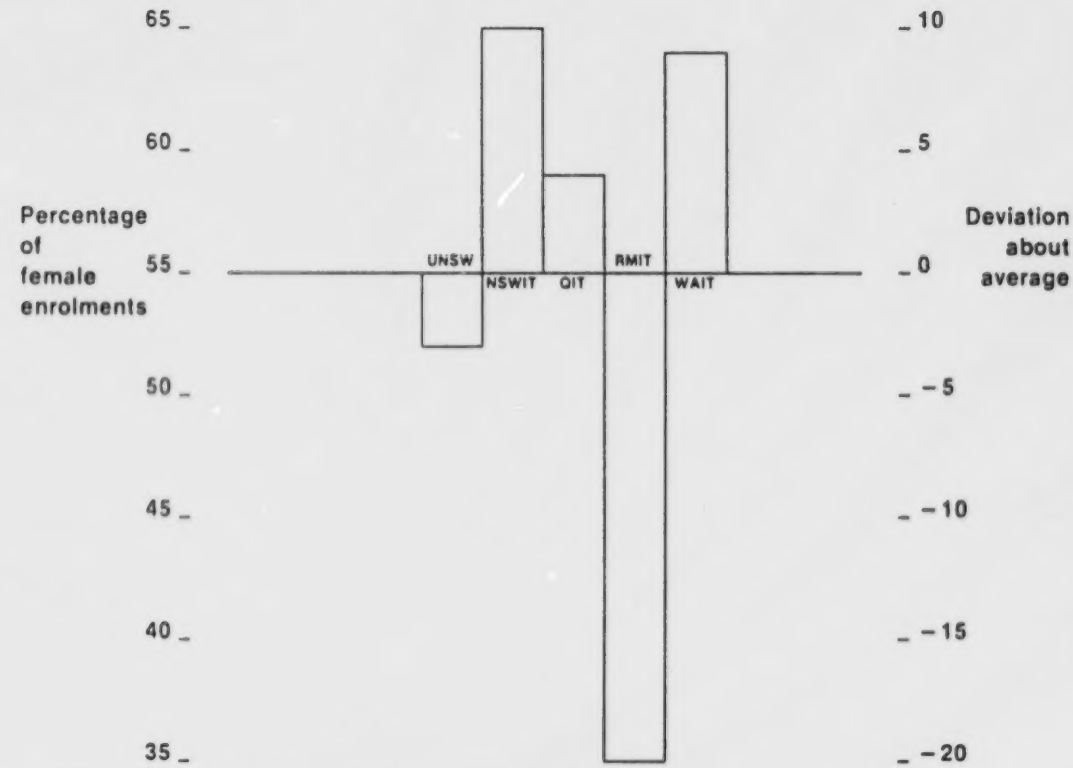
Notes: 1. This diagram is based on tables 6(a) to 6(l).

Diagram 16
Microbiology
Undergraduate Enrolments in 1985



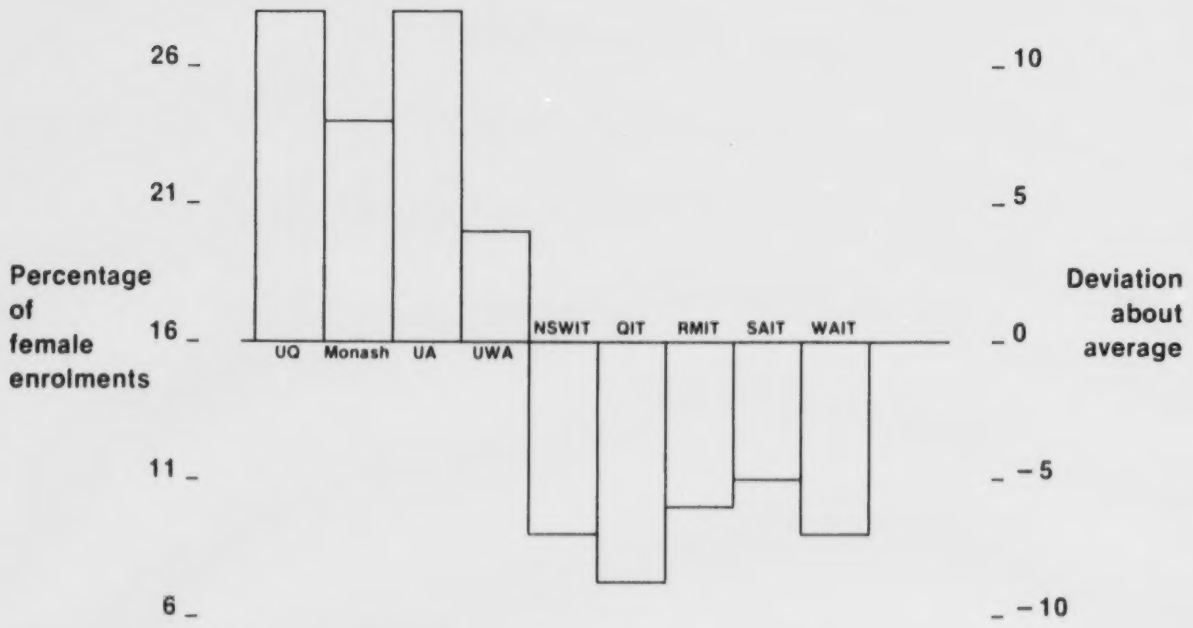
Notes: 1. This diagram is based on tables 6(a) to 6(l).

WISTA
Diagram 17
Biotechnology
Undergraduate Enrolments in 1985



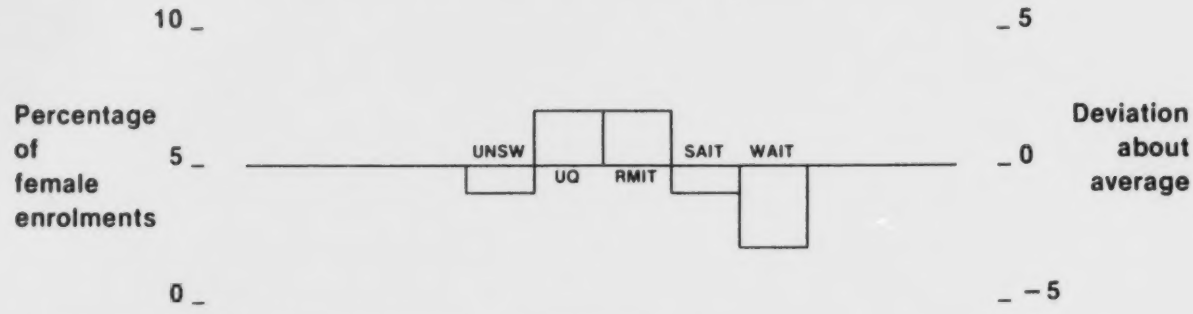
Notes: 1. The diagram is based on tables 6(a) to 6(l).

WISTA Diagram 18
Geology Undergraduate Enrolments in 1985



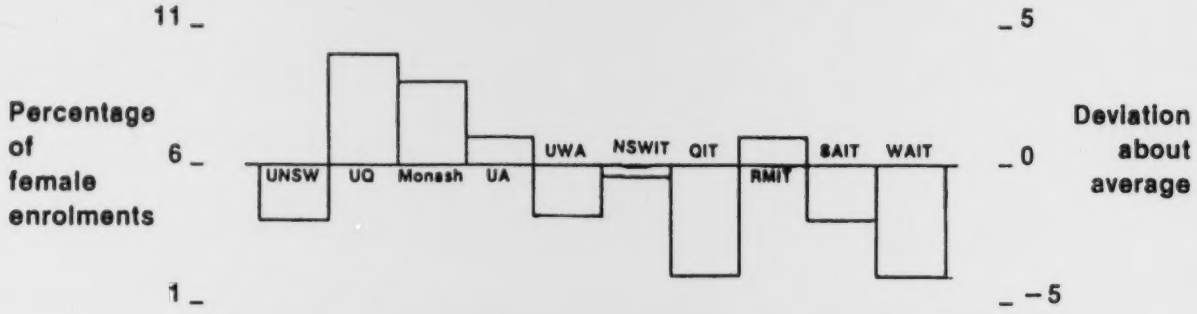
Notes: 1. This diagram is based on tables 6(a) to 6(l).

WISTA Diagram 19
Minerals Undergraduate Enrolments in 1985



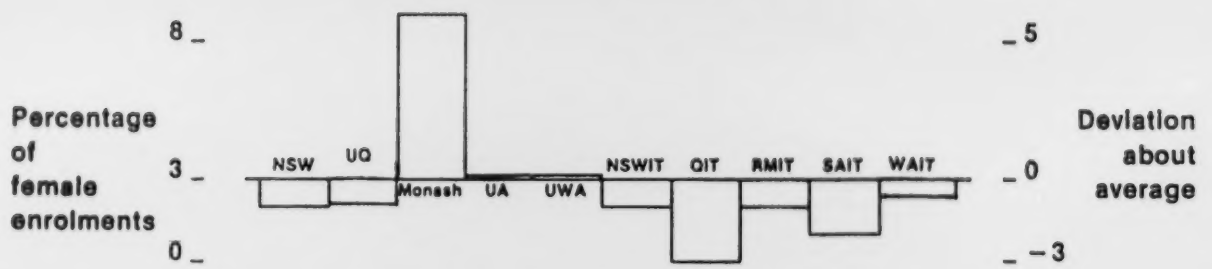
Notes: 1. This diagram is based on tables 6(a) to 6(l).

WISTA Diagram 20
Civil Engineering Undergraduate Enrolments in 1985



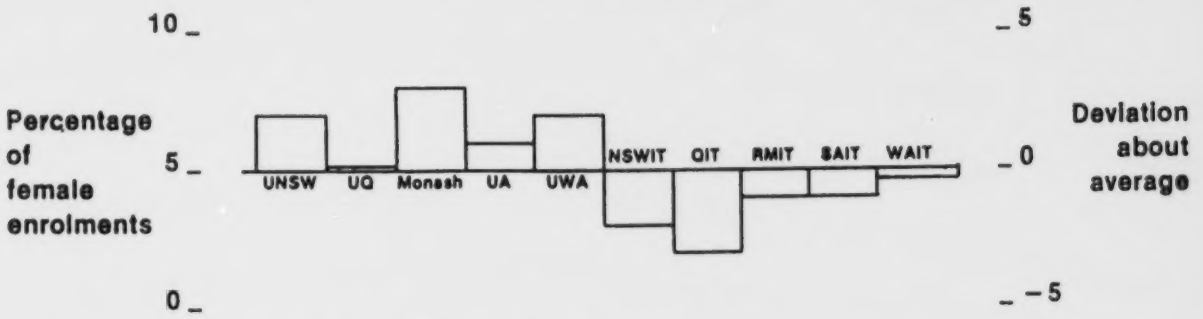
Notes: 1. This diagram is based on tables 6(a) to 6(l).

WISTA Diagram 21
Mechanical Engineering Undergraduate Enrolments in 1985



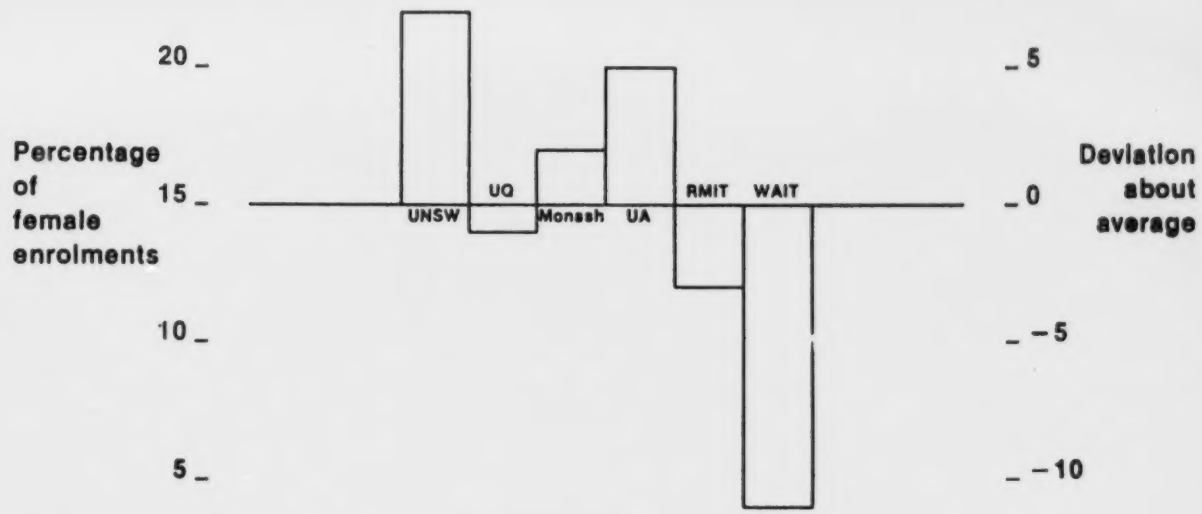
Notes: 1. This diagram is based on tables 6(a) to 6(l).

WISTA Diagram 22
Electrical Engineering Undergraduate Enrolments in 1985



Notes: 1. This diagram is based on tables 6(a) to 6(l).

WISTA Diagram 23
Chemical Engineering Undergraduate Enrolments in 1985



Notes: 1. This diagram is based on tables 6(a) to 6(l).

TABLE 1

ALL STUDENTS by sex and institution, 30 April 1985

Institution	Male	Female	Total	Women as % of total
University of New South Wales	10968	6258	17226	36.3%
New South Wales Institute of Technology	6250	2423	8673	27.9%
University of Queensland	9428	8520	17948	47.5%
Queensland Institute of Technology	6145	2348	8493	27.6%
Monash University	7112	6474	13586	47.7%
Royal Melbourne Institute of Technology	7140	3735	10875	34.3%
University of Adelaide	5220	3802	9022	42.1%
South Australian Institute of Technology	4407	2340	6747	34.7%
University of Western Australia	5321	4191	9512	44.1%
Western Australian Institute of Technology	6860	5162	12022	42.9%
TOTALS	68851	45253	114104	39.7%

Source: Statistical returns supplied by institutions for WISTA project, 1986.

Footnote: All fulltime, parttime, internal and (where appropriate) external students.

TABLE 2

ALL STUDENTS divided by sex and type of institution, 30 April 1985

Universities	ALL STUDENTS			Women as % of total
	Male	Female	Total	
University of New South Wales	10968	6258	17226	36.3%
University of Queensland	9428	8520	17948	47.5%
Monash University	7112	6474	13586	47.7%
University of Adelaide	5220	3802	9022	42.1%
University of Western Australia	5321	4191	9512	44.1%
SUB-TOTAL	38049	29245	67294	43.5%
Institutes				
New South Wales Institute of Technology	6250	2423	8673	27.9%
Queensland Institute of Technology	6145	2348	8493	27.6%
Royal Melbourne Institute of Technology	7140	3735	10875	34.3%
South Australian Institute of Technology	4407	2340	6747	34.7%
Western Australian Institute of Technology	6860	5162	12022	42.9%
SUB-TOTAL	30802	16008	46810	34.2%
TOTALS	68851	45253	114104	39.7%

Sources: Statistical returns supplied by institutions for WISTA project, 1986.

Footnote: All fulltime, parttime, internal and (where appropriate) external students.

TABLE 3

ALL UNDERGRADUATE students by sex and institution, 30 April 1985

Institution	Male	Female	Total	Women as % of total
University of New South Wales	8497	5149	13646	37.7%
New South Wales Institute of Technology	5524	2211	7735	28.6%
University of Queensland	6973	7048	14021	50.3%
Queensland Institute of Technology	5613	2134	7747	27.5%
Monash University	5287	5053	10340	48.9%
Royal Melbourne Institute of Technology	6162	3354	9516	35.2%
University of Adelaide	3964	3011	6975	43.2%
South Australian Institute of Technology	3711	1892	5603	33.8%
University of Western Australia	4016	3372	7388	45.6%
Western Australian Institute of Technology	5482	4478	9960	45.0%
TOTALS	55229	37702	92931	40.6%

Source: Statistical returns supplied by institutions for WISTA project, 1986.

Footnote: All fulltime, parttime, internal and (where appropriate) external students.

TABLE 4

ALL POSTGRADUATE students by sex and institution, 30 April 1985

Institution	Masters Coursework		Masters Res. and Thesis		Ph.D.		Other Postgraduate	
	Total	Women as %T	Total	Women as %T	Total	Women as %T	Total	Women as %T
University of NSW	1944	32.4%	501	30.0%	776	25.9%	359	36.5%
NSWIT	317	8.8%	97	25.8%	-	-	524	30.3%
University of Qld	1010	36.7%	479	30.9%	864	27.4%	1574	45.5%
QIT	61	14.8%	50	8.0%	-	-	635	31.7%
Monash University	1026	36.8%	610	40.5%	654	33.5%	956	60.4%
RMIT	287	7.3%	110	10.0%	-	-	962	36.3%
University of Adelaide	325	29.8%	333	35.1%	504	29.8%	360	41.1%
SAIT	104	17.3%	84	14.3%	-	-	956	43.7%
University of WA	494	25.0%	399	40.0%	455	25.0%	776	55.0%
WAIT			357	27.0%	-	-	1705	34.0%
TOTALS	4468	31.2%	2719	32.0%	2823	28.3%	7875	41.3%

Source: Statistical returns supplied by institutions for WISTA project, 1986.

Footnotes: (a) Other Postgraduates at University of Queensland includes higher doctorate, masters qualifying, postgraduate Diplomas, Bachelor Honours, and postgraduate miscellaneous.

(b) Includes fulltime, parttime, internal and (where appropriate) external students.

(c) The Institutes did not offer Ph.D. programmes in 1985.

(d) Masters figures at WAIT not subdivided between coursework and thesis.

TABLE 5(a)

ALL STUDENTS BY SEX AND LEVEL, 30 April 1985

	UNIVERSITY OF NEW SOUTH WALES				NEW SOUTH WALES INSTITUTE OF TECHNOLOGY			
	M	F	T	Women as % of total	M	F	T	Women as % of total
Undergraduate	8497	5149	13646	37.7%	* 5524	2211	7735	28.6%
Masters - Coursework	1315	629	1944	32.4%	289	28	317	8.8%
Masters - Research	353	148	501	29.5%	72	25	97	25.8%
Ph.D. (and M.D., UNSW)	575	201	776	25.9%	-	-	-	-
Other Postgraduate ϕ	228	131	359	36.5%	365	159	524	30.3%
TOTALS	10968	6258	17226	36.3%	6250	2423	8673	27.9%

Source: Statistical return from UNSW

ϕ Postgraduate diplomas

Source: Statistical return from NSWIT

ϕ Postgraduate diplomas

* Includes U/G diploma students - Male 39 : Female 180) of which 172 are state funded Nursing Education students included in these figures.

TABLE 5(b)

ALL STUDENTS BY SEX AND LEVEL, 30 April 1985

	UNIVERSITY OF QUEENSLAND				QUEENSLAND INSTITUTE OF TECHNOLOGY			
	M	F	T	Women as % of total	M	F	T	Women as % of total
Undergraduate	6973	7048	14021	50.3%	5613	2134	7747	27.5%
Masters - Coursework	639	371	1010	36.7%	52	9	61	14.8%
Masters - Research & Thesis	331	148	479	30.9%	46	4	50	8.0%
Ph.D.	627	237	864	27.4%	-	-	-	-
Other Postgraduate *	858	716	1574	45.5%	434	201	635	31.7%
TOTALS	9428	8520	17948	47.5%	6145	2348	8493	27.6%

Source: Statistical return from University, 1986

Source: Statistical return from Institute, 1986

* U of Q Includes higher doctorate, masters qualifying, postgraduate diplomas, bachelor honours, and postgraduate miscellaneous.

QIT Includes postgraduate diploma courses.

TABLE 5(c)

ALL STUDENTS BY SEX AND LEVEL, 30 April 1985

	MONASH UNIVERSITY				ROYAL MELBOURNE INSTITUTE OF TECHNOLOGY			
	M	F	T	Women as % of total	M	F	T	Women as % of total
Undergraduate	ϕ 5287	5053	10340	48.9%	6162	3354	9516	35.3%
Masters - Coursework	648	378	1026	36.8%	266	21	287	7.3%
Masters - Research & Thesis	363	247	610	40.5%	99	11	110	10.0%
Ph.D.	435	219	654	33.5%	-	-	-	-
Other Postgraduate	* 379	577	956	60.4%	# 613	349	962	36.3%
TOTALS	7112	6474	13586	47.7%	7140	3735	10875	34.3%

Source: Statistical return from University, 1986

Source: Return from Institute, 1986

ϕ Includes Bachelor (Hons), Bachelor (Pass), Miscellaneous (not for degree)

* Includes Higher Doctorate, Masters Preliminary, Postgraduate Diploma, Postgraduate Bachelor.

Includes postgraduate diplomas.

TABLE 5(d)

ALL STUDENTS BY SEX AND LEVEL, 30 April 1985

		UNIVERSITY OF ADELAIDE				SOUTH AUSTRALIAN INSTITUTE OF TECHNOLOGY			
		M	F	T	Women as % of total	M	F	T	Women as % of total
Undergraduate		3964	3011	6975	43.2%	3711	1892	5603	33.8%
Masters - Coursework	(a)	228	97	325	29.8%	86	18	104	17.3%
Masters - Research & Thesis		216	117	333	35.1%	72	12	84	14.3%
Ph.D.		354	150	504	29.8%	SAIT does not offer Ph.D. programmes			
Higher Doctorate		42	4	46 (d)	8.7%				
Other Postgraduate	(b)	170	144	314	45.9%	ø 538	418	956	43.7%
Miscellaneous	(c)	246	279	525	53.1%				
TOTALS		5220	3802	9022	42.1%	4407	2340	6747	34.7%

Source : Return from University and University of Adelaide Student/Staff Statistics 1985, tables 3 & 4(b).

Source: Statistical return from Institute 1986

ø Graduate Diploma Courses.

(a) Includes 11 (9M, 2F) postgraduate Bachelor of Education degree.
(b) Postgrad.Diploma - includes 52 doing a Dip. of Computer Science
(c) Students from SAIT and other visiting students doing undergraduate, usually single subjects.
(d) 45 out of 46 were enrolments in Higher Doctorates in Faculty of Medicine (ie mostly M.D.'s)
1 candidate was enrolled in Faculty of Law.

TABLE 5(e)

ALL STUDENTS BY SEX AND LEVEL, 30 April 1985

	UNIVERSITY OF WESTERN AUSTRALIA				WESTERN AUSTRALIAN INSTITUTE OF TECHNOLOGY (Now Curtin University of Technology)			
	M	F	T	Women as % of total	M	F	T	Women as % of total
Undergraduate	4016	3372	7388	45.6%	5482	4478	9960	45.0%
Masters - Coursework	371	123	494	24.9%	159	54	213	25.4%
Masters - Research & Thesis	240	159	399	39.8%	102	72	174	41.4%
Ph.D.	342	113	455	24.8%	-	-	-	-
Other Postgraduate *	352	424	776	54.6%	1117	588	1705	34.5%
Gross totals	5321	4191	9512	44.1%	6860	5192	12052	43.1%
Less dual enrolments	27	20	47	-				
Net enrolments	5294	4171	9465	44.1%	6860	5192	12052	43.1%

Source: Statistical return from UWA

Statistical return from WAIT

* Higher degree qualifying, postgraduate diploma, postgraduate bachelor degree and bachelor degree with honours requiring a separate year after completing requirements for a pass degree.

TABLE 6(a)

UNIVERSITY OF NEW SOUTH WALES

All student enrolments in survey disciplines - 1985

Discipline	Undergraduate				Masters-Coursework				Masters Research & Thesis				Ph.D.				Other Post Grad.			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Physics *	83	21	104	20.2					8	4	12	33.3	37	6	43	14.0				
Chemistry *	82	44	126	34.9	6	3	9	33.3	23	8	31	25.8	36	6	42	14.3	6	3	9	33.3
Computer Science ϕ	151	91	242	37.6					19	2	21	9.5	37	3	40	7.5				
Mathematics *	129	80	209	38.3	17	5	22	22.7	5	-	5	-	18	2	20	10				
Microbiology	26	50	76	65.8					2	1	3	33.3	9	6	15	40				
Biotechnology	12	13	25	52.0	10	5	15	33.3	5	-	5	-	11	10	21	47.6	-	1	1	100
Biochemistry	50	74	124	59.7						11	11	100	10	1	11	9.1				
Chem.Eng.& Indust.Chem.	348	101	449	22.5	3	2	5	40.0	21	7	28	25	28	4	32	12.5				
Mining Engineering	129	3	132	2.3	39	1	40	2.5	5	-	5	-	10	-	10	-	1	-	1	-
Civil Engineering	502	22	524	4.2	129	1	130	0.8	17	2	19	10.5	21	2	23	8.7	52	4	56	7.1
Ceramic Engineering	44	7	51	13.7																
Mech.& Indust.Eng.	469	12	481	2.5	81	2	83	2.4	12	-	12	-	26	1	27	3.7	29	2	31	6.5
Elect.Eng.& Computer Science	735	57	792	7.2	64	5	69	7.2	14	1	15	6.7	37	3	40	7.5	44	8	52	15.4
Mineral Processing	1	-	1	-																
Nuclear Engineering									4	-	4	-	2	-	2	-				
Metallurgy	41	4	45	8.9					16	1	17	5.9	11	-	11	-				
Surveying	203	16	219	7.3	1	-	1	-	5	-	5	-	3	-	3	-	2	-	2	-
Biomedical Engineering					53	9	62	14.5	2	-	2	-	8	2	10	20	10	1	11	9.1

* Excludes medical and engineering students.

ϕ Excludes medical students; excludes engineering who are included under "electrical engineering & computer science".

There is no double-counting in this table.

TABLE 6(b)

NEW SOUTH WALES INSTITUTE OF TECHNOLOGY

All student enrolments in survey disciplines - 1985

Discipline (e)	Undergraduate				Masters Coursework				Masters Research & Thesis				Graduate Diploma				Other Post Grad			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Mathematics	84	58	142	40.8	10.5	1.5	12	12.5	2	-	2	-	6.5	1.5	8	18.8				
Physics	174	28	202	13.9					5	-	5	-								
Chemistry	127.5	85.5	213	40.1					8	1.5	9.5	15.8								
Biomedical Science (a)	71	168	239	70.3																
Biology (b)	54.5	67.5	122	55.3																
Computer Science	342.5	123.5	466	26.5	30.5	3.5	34	10.3	2	-	2	-	49.5	15.5	65	23.8				
Civil Engineering	417	26	443	5.9	7	-	7	-	2.5	-	2.5	-	14	-	14	-				
Mechanical Engineering	429	8	437	1.8	8.5	-	8.5	-	2.5	-	2.5	-	10	1.0	11	9.1				
Electrical Engineering	455.5	14	469.5	3.0					1.5	-	1.5	-	9	0.5	9.5	5.3				
Geology	97	10	107	9.3									1	-	1	-				
Building	128.5	2.5	131	1.9					1.5	-	1.5	-	21	2.5	23.5	10.6				
Quantity Surveying	33	3.0	36	8.3																
Biochemistry } (c)									11.5	5.5	17	32.4	4.5	4	8.5	47.1				
Biotechnology } (c)					7.5	1	8.5	11.8												

Footnotes (a) Includes figures for Biochemistry, Microbiology & Cellular Pathology (Biochem. & Microbiology needed for this study)
(b) Includes figures for Biotechnology & Environmental Biology (Biotechnology figures needed for this study).
(c) Separate figures given for these 2 disciplines in Postgraduate figures. For U/G grouping see notes (a) & (b).
(d) Figures shown as EFTS (where a fulltime enrolment equals 1 and a parttime enrolment equals 0.5).
(e) Include all students who are enrolled in courses which fall within these disciplines.
(f) Excludes students from veterinary, agriculture and medicine.

TABLE 6(c)

UNIVERSITY OF QUEENSLAND

All student enrolments in survey disciplines - 1985

Discipline	Undergraduate				Masters Coursework				Masters Research & Thesis				Ph.D.				Other Post.Grad.			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Engineering (a)	239	23	262	8.8																
Chemical Engineering	91	15	106	14.2	5	2	7	28.6	5	-	5	-	28	5	33	15.2	3	-	3	-
Civil Engineering	149	16	165	9.7	16	-	16	-	20	1	21	4.8	31	1	32	3.1	5	-	5	-
Electrical Engineering	190	11	201	5.5	6	1	7	14.3	16	-	16	-	15	-	15	-	19	2	21	9.5
Mechanical Engineering	147	4	151	2.6	1	-	1	-	13	-	13	-	13	-	13	-	1	1	2	50
Mining & Metallurgical Engineering	76	6	82	7.3	3	-	3	-	13	-	13	-	33	2	35	5.7	2	-	2	-
Biochemistry (b)	141	184	325	56.6					13	6	19	31.6	22	11	33	33.3	3	4	7	57.1
Biotechnology					-	3	3	100					4	1	5	20	1	-	1	-
Chemistry (b)	312	285	597	47.7					5	-	5	-	25	6	31	19.4	1	1	2	50
Computer Science (b)	488	116	604	19.2	8	-	8	-	6	-	6	-	14	1	15	6.7	2	-	2	-
Geology & Mineralogy(b)	116	45	161	28.0					3	-	3	-	20	1	21	4.8	7	1	8	12.5
Mathematics (b)	989	400	1389	28.8	2	1	3	33.3	2	-	2	-	10	4	14	28.6	1	-	1	-
Microbiology (b)	91	136	227	59.9	-	1	1	100	3	4	7	57.1	21	10	31	32.3	1	-	1	-
Physics (b)	329	77	406	19.0					5	-	5	-	16	-	16	-	1	1	2	50

Footnotes (a) Common 1st year across all disciplines - therefore U/G figures for the individual disciplines will not include 1st year.
(b) Totals include P/G Honours students.
(c) Other Postgraduate includes higher Doctorate, Masters Qualifying, Postgraduate Diploma, Postgraduate Miscellaneous.
(d) Refers to students enrolled in the Faculty of Science or Faculty of Engineering; excludes other faculties.

TABLE 6(d)

QUEENSLAND INSTITUTE OF TECHNOLOGY

All student enrolments in survey disciplines, 30 April 1985

Discipline	Undergraduate				Masters-Coursework				Masters Research & Thesis				Ph.D.				Other Post Grad.			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Geology	68	5	73	6.8					4	-	4	-								
Chemistry (1)	117	50	167	29.9	15	1	16	6.3	7	2	9	22.2								
Mathematics (2)	80	51	131	38.9					1	-	1	-								
Physics (3)	45	9	54	16.7	19	-	19	-	2	-	2	-								
Biochemistry, Micro-biology & Physiology (4)	67	95	162	58.6	6	7	13	53.8	9	2	11	18.2								
Computer Science (5)	307	32	339	9.4					3	-	3	-					25	4	29	13.8
Civil Engineering	313	6	319	1.9					3	-	3	-					31	1	32	3.1
Electrical Engineering	354	4	358	1.1					5	-	5	-					18	1	19	5.3
*Electronic Systems Engineering/Computing	21	3	24	12.5																
Mechanical Engineering	243	-	243	-					5	-	5	-					6	-	6	-
Building	165	1	166	0.6													13	-	13	-
Quantity Surveying	49	2	51	3.9													3	-	3	-
Surveying	149	2	151	1.3													6	-	6	-

* 1985 - 1st year of course

Source: Statistical returns from Institute 1986.

(1) Includes B.App.Sc. - Chemistry, B.App.Sc. - App.Chemistry, M.App.Sc. - Analytical Chem.(Coursework), M.App.Sc. - Research & Thesis
(2) Includes B.App.Sc. - Mathematics, M.App.Sc. - Research & Thesis.
(3) Includes B.App.Sc. - Physics, M.App.Sc. - Medical Physics (Coursework), M.App.Sc. - Research & Thesis.
(4) Includes B.App.Sc. - Medical Lab.Sc., M.App.Sc. - Medical Lab.Sc. (Coursework), M.App.Sc. - Research & Thesis.
(5) Includes B.App.Sc. - Computer Science, M.App.Sc. - Research & Thesis, Grad.Dip. in Computing Science.

TABLE 6(e)

MONASH UNIVERSITY

All student enrolments in survey disciplines, 30 April 1985

Discipline	Undergraduate				Masters Coursework				Masters Research & Thesis				Ph.D.				Other Post Grad.			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Biochemistry	117	139	256	54.3					6	4	10	40.0	15	37	52	71.1				
Microbiology	64	95	159	59.7					3	1	4	25.0	15	4	19	21.1				
Chemical Engineering	103	21	124	16.9	6	-	6	-	10	1	11	9.1	11	-	11	-				
Civil Engineering	204	20	224	8.9	64	1	65	1.5	19	-	19	-	18	-	18	-				
Electrical Engineering	327	28	355	7.9	5	1	6	16.7	21	-	21	-	12	-	12	-				
Materials Engineering	119	15	134	11.2					12	1	13	7.7	16	1	17	5.9	5	-	5	-
Mechanical Engineering	265	26	291	8.9	22	1	23	4.3	10	1	11	9.1	10	-	10	-				
Chemistry	477	376	853	44.1					10	8	18	44.4	33	10	43	23.3				
Computer Science	357	174	531	32.8					9	3	12	25.0	9	-	9	-				
Genetics	11	18	29	62.1					-	3	3	100	7	3	10	30.0				
Geology	93	29	122	23.8					8	-	8	-	25	3	28	10.7				
Mathematics	900	691	1591	43.4	91	35	126	27.8	19	8	27	29.6	13	3	16	18.8				
Physics	315	81	396	20.5					2	-	2	-	31	1	32	3.1				
Materials Science	7	4	11	36.4																
Meteorology	12	1	13	7.7																

Source:- Statistical returns from University, 1986.

Footnote: All disciplines include all those taking the subject regardless of Faculty of enrolment.

TABLE 6(f)

ROYAL MELBOURNE INSTITUTE OF TECHNOLOGY

All student enrolments in survey disciplines, 30 April 1985

Discipline	Undergraduate				Masters Coursework				Masters Research & Thesis				Ph.D.				Other Postgrad/			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Chemical Engineering	150	20	170	11.8					3	-	3	-								
Civil & Aeronautical Engineering	360	26	386	6.7					7	-	7	-								
Communication & Electronic Engineering	500	19	519	3.7					21	1	22	4.5					52	1	53	1.9
Electrical Engineering	196	7	203	3.4					5	-	5	-								
Mechanical & Production Engineering	260	4	264	1.5					8	-	8	-					39	5	44	11.4
Metallurgy & Mining	98	7	105	6.7					2	-	2	-					25	-	25	-
Geology & Geological Engineering *	118	13	131	9.9					2	-	2	-					10	-	10	-
Faculty of Engineering Systems Engineering					52	-	52	-												
Chemistry	174	150	324	46.3					15	2	17	11.8								
Physics	110	12	122	9.8					13	1	14	7.1					13	23	36	63.9
Mathematics	229	108	337	32.0					1	-	1	-					50	13	63	20.6
Surveying	200	54	254	21.3					2	-	2	-					18	2	20	10.0
Computing	314	104	418	24.9					5	-	5	-					33	8	41	19.5
Biotechnology	15	8	23	34.8																
Applied Biology	93	122	215	56.7					6	3	9	33.3								

Source: Statistical returns from RMIT.

Notes (1) Physics figures include enrolments in the Dept of Applied Physics but exclude paramedical students.

(2) Chemistry, Biology & Biotechnology exclude paramedical students.

(3) Students are not double-counted. Each student is shown in relation to the course in which he or she is enrolled and not for each subject. Thus Chem.Eng.students studying physics are not shown again under physics. Statistics provided are head counts of students enrolled for courses and not subjects.

TABLE 6(g)(i)

UNIVERSITY OF ADELAIDE

UNDERGRADUATE STUDENTS BY SURVEY DISCIPLINES, SEX AND LEVEL (30 APRIL 1985)

NOTE: Figures for Undergraduate enrolments in the various disciplines/courses relevant to WISTA have been selected by the University from the University's Subject and Option Enrolments for 1985 to give relative numbers of men and women taking those particular subjects. There are additional subjects and options taken by students in various combinations.

(a) **MATHEMATICS**

Subject	Male	Female	Total	Female as % of total
(1) Mathematics I *	372	129	501	25.7
Statistics IH	218	165	383	43.1
(2) Applied Mathematics IIA	113	65	178	36.5
Applied Mathematics IIB	151	18	169	10.7
Pure Mathematics II	49	28	77	36.4
Mathematical Statistics II	39	20	59	33.9
(3) Applied Mathematics III	76	29	105	27.6
Pure Mathematics III	22	8	30	26.7
Theoretical Physics III	10	3	13	23.1
Mathematical Physics III	3	1	4	25.0
Mathematical Statistics III	15	20	35	57.1
HONOURS				
Applied Mathematics	6	5	11	45.5
Pure Mathematics	4	3	7	42.9
Mathematical Physics	1	-	1	-
Statistics	3	1	4	25.0
Sub total	14	9	23	39.1

Footnotes

* (i) Excludes First year 42 males 31 females (total 73) doing the half subject Mathematics IH and 91 males and 63 females (total 154) doing full subject Mathematics IM, both subjects being for students who do not intend to proceed to higher level courses in Mathematics. Includes First year Engineering students and those from other faculties (eg Arts, Agricultural Science, Economics) who chose to do the course rather than IH or IM.

(ii) 50% of Applied Maths IIB are Engineering students.

(b) **COMPUTER SCIENCE**

Subject	Male	Female	Total	Female as % of total
(1) Computer Science IH	201	88	289	30.4
(2) Computer Science II *	67	33	100	33.0
Computer Science IIC *	40	6	46	13.0
(3) Computer Science III	70	15	85	17.6
HONOURS				
Computer Science	9	-	9	-

Footnote

* Alternative second year subjects. Both lead to Computer Science III.

These figures include some engineering students.

(c) **PHYSICS**

Subject	Male	Female	Total	Female as % of total
Physics I **	228	63	291	21.6
Physics II **	73	7	80	8.8
Physics III	24	3	27	11.1
HONOURS				
Physics	5	2	7	28.6

Footnote

** Includes Electrical and Electronic Engineering students and students from other Faculties.

Excludes Chemical, Civil and Mechanical Engineering students and medical students.

(d) **CHEMISTRY**

Subject	Male	Female	Total	Female as % of total
(1) Chemistry I ϕ	313	206	519	39.7
(2) Organic Chemistry II	52	18	70	25.7
Physicsl & Inorganic Chemistry II	39	10	49	20.4
Chemistry II *	10	4	14	28.6
(3) Organic Chemistry III	22	11	33	33.3
Physical & Inorganic ChemistryIIIB	19	6	25	24.0
Chemistry III	1	-	1	-
HONOURS				
Organic Chemistry	4	1	5	20.0
Physical & Inorganic Chemistry	5	4	9	44.4
Sub-total	9	5	14	35.7

Footnotes

ϕ Excludes students taking Chemistry for Medicine, Agricultural Science, Dentistry, Civil Engineering or Mechanical Engineering.
Includes students taking Chemistry for degrees in Electrical and Electronic engineering and Chemical Engineering.

* Suitable for those wishing to pursue the biological sciences.

(e) **BIOCHEMISTRY**

Subject	Male	Female	Total	Female as % of total
Biochemistry II *	37	56	93	60.2
Biochemistry III	30	38	68	55.9
HONOURS	6	6	12	50.0

Footnotes

* Excludes Medical and Dental students.
Second and third year subjects (not offered at first year level).

(f) **MICROBIOLOGY**

Subject	Male	Female	Total	Female as % of total
Microbiology & Immunology II	30	65	95	68.4
Microbiology & Immunology III	20	21	41	51.2
HONOURS	6	4	10	40.0

Footnote Second and third year subjects (not offered at first year level).

(g) **GENETICS**

Subject	Male	Female	Total	Female as % of total
(1) Genetics & Human Variation IH *	55	116	171	67.8
(2) Genetics II	15	33	48	68.8
(3) Genetics III	16	10	26	38.5
HONOURS	3	1	4	25.0

Footnote * Excludes those doing Medicine or Agricultural Science.

(h) **GEOLOGY AND GEOPHYSICS**

Subject	Male	Female	Total	Female as % of total
(1) Geology I	75	38	113	33.6
(2) Geology II	27	8	35	22.9
(3) Geology III	23	3	26	11.5
Other third year *	11	5	16	31.3
HONOURS	18	6	24	25.0

Footnote * Enrolments aggregated for Geology & Economic Geology IIIA & IIIB and Geophysics III.

(i) **ENGINEERING - FIRST YEAR**

Subject	Male	Female	Total	Female as % of total
Engineering I & IE	160	14	174	8.0

Footnote Quotas for admission to first year of the Engineering course have reduced from approximately 180 in 1982 to approximately 170 in 1983, approximately 160 in 1984 and approximately 150 in 1985. Details of the effect of this reduction on the separate branches of engineering in subsequent years would need to be taken into account if looking at attrition from one year to the next. As from 1986 the quota increased to 180 again following receipt of a designated grant for Engineering education.

NOTE Honours work for Engineering specialities is taken concurrently with Year 4 of Bachelor degree courses and honours figures are therefore also included in figures for Engineering IVA subjects.

(j) **CHEMICAL ENGINEERING**

Subject	Male	Female	Total	Female as % of total
Chemical Engineering IH ϕ	28	5	33	15.2
Chemical Engineering II	23	6	29	20.7
Chemical Engineering IIIA	18	4	22	18.2
Chemical Engineering IVA	26	7	33	21.2
HONOURS	20	6	26	23.1

Footnote ϕ Concurrent with Engineering IE

(k) **ELECTRICAL & ELECTRONIC ENGINEERING**

Subject	Male	Female	Total	Female as % of total
Electrical & Electronic Eng. II	47	2	49	4.1
Electrical & Electronic Eng.III	53	3	56	5.3
Electrical & Electronic Eng.IVA	68	6	74	8.1
HONOURS	40	3	43	7.0

(l) **CIVIL ENGINEERING**

Subject	Male	Female	Total	Female as % of total
Civil Engineering I	43	4	47	8.5
Geotechnical Engineering II	20	4	24	16.7
Geotechnical Engineering III	30	2	32	6.3
Civil Engineering IVA	30	-	30	-
HONOURS	17	-	17	-

(m) **MECHANICAL ENGINEERING**

Subject	Male	Female	Total	Female as % of total
Mechanical Engineering II	28	1	29	3.4
Mechanical Engineering III	29	1	30	3.3
Mechanical Engineering IVA	30	1	31	3.2
HONOURS	24	1	25	4.0

TABLE 6(g)(ii)

UNIVERSITY OF ADELAIDE

POSTGRADUATE STUDENTS IN THE SURVEY DISCIPLINES BY SEX AND LEVEL (as at November 1985)

Discipline	Masters (Research)				Ph.D.				Other Postgraduate			
	M	F	Total	F as % Total	M	F	Total	F as % Total	M	F	Total	F as % Total
Mathematics	13	3	16	18.8	35	3	38	7.9				
Computer Science	8	-	8	-	4	-	4	-	44*	10*	54*	18.5*
Physics	7	2	9	22.2	8	-	8	-				
Organic, Physical & Inorganic Chemistry	4	1	5	20.0	16	1	17	5.9				
Biochemistry	-	-	-	-	19	15	34	44.1				
Microbiol & Immunology	2	2	4	50.0	10	5	15	33.3				
Genetics	-	1	-	100.0	1	3	4	75.0				
Geology & Geophysics	10	-	10	-	23	3	26	11.5				
Chemical Engineering	2	-	2	-	4	2	6	33.3				
Electrical & Electronic Engineering	16ϕ	-	16	-	12	-	12	-				
Civil Engineering	10	-	10	-	4	-	4	-				
Mechanical Engineering	6ϕ	1	7	14.3	5	-	5	-				

Footnotes

* Postgraduate diploma

ϕ Includes 2 coursework candidates.

TABLE 6(h)

SOUTH AUSTRALIAN INSTITUTE OF TECHNOLOGY

All student enrolments in survey disciplines, 30 April 1985

Discipline	Undergraduate				Masters Coursework				Masters Research & Thesis				Ph.D.				Other Postgrad.			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Civil Engineering	174	8	182	4.4					1	-	1	-					34	1	35	2.9
Electrical Engineering	119	7	126	5.6					3	-	3	-					1	-	1	-
Mechanical Engineering	334	5	339	1.5					2	-	2	-								
Electronic Engineering	398	13	411	3.2					13	-	13	-					32	-	32	-
Mining & Metallurgy	154	6	160	3.8					4	-	4	-					2	-	2	-
Chemical Technology	95	41	136	30.1					10	-	10	-								
Applied Geology	31	4	35	11.4					3	-	3	-					2	-	2	-
Surveying	116	5	121	4.1					3	-	3	-					1	-	1	-
Cartography	16	7	23	30.4																
Physics	42	4	46	8.7					6	-	6	-								
Computing	316	89	405	22.0					1	1	2	50					115	31	146	21.2
Mathematics									1	-	1	-					4	-	4	-
Maths & Computing	5	-	5	-																

Source: Statistical returns from SAIT.

Notes (1) There are no undergraduate students in maths at SAIT other than those studying maths as a service subject.
(2) Chemical Technology includes Chemistry; Chemistry plus Microbiology; and Chemical Technology. Students do not stream into these options until third year.
(3) Physics figures are for Bachelor and Masters degrees in Applied Physics.

TABLE 6(k)

UNIVERSITY OF WESTERN AUSTRALIA

All student enrolments in survey disciplines, 1985

Discipline	Undergraduate				Masters Coursework				Masters Research & Thesis				Ph.D.				Other PostGrad.			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
(a) Engineering	197	16	213	7.5																
" 2nd year (No major stated)	98	9	107	8.4																
(b) Civil Engineering	105	5	110	4.5	39	2	41	4.9	8	-	8	-	6	-	6	-	1	-	1	-
(b) Electrical "	98	7	105	6.7	19	2	21	9.5	3	-	3	-	11	1	12	8.3				
(b) Electronic "	56	4	60	6.7	20	-	20	-	5	-	5	-	12	-	12	-	4	-	4	-
(b) Mechanical "	85	3	88	3.4	28	-	28	-	6	2	8	25	7	1	8	12.5	2	-	2	-
Computer Science (c)	275	102	377	27.1					1	-	1	-	2	-	2	-	7	2	9	22.2
Geology (c)	233	58	291	19.9					7	1	8	12.5	20	6	26	23.1	20	5	25	20.0
Mathematics (d)	1499	640	2089	30.6					4	2	6	33.3	3	1	4	25.0	5	-	5	-
Physics (c)	616	187	803	23.3					5	-	5	-	22	-	22	-	11	1	12	8.3
Biochemistry (c)	322	264	586	45.1					-	2	2	100	13	4	17	23.5	6	6	12	50.0
Microbiology	113	99	212	46.7					9	4	13	30.8	9	5	14	35.7	5	7	12	58.3
Chemistry	488	335	823	40.7									40	10	50	20.0				

(a) All Engineering students take a common first year course.
(b) U/G figures for Engineering students include Honours students.
(c) U/G figures exclude students enrolled for courses other than those offered by the Faculty of Science.
(d) U/G figures include course offered by the Faculty of Arts.

TABLE 6(1)

WESTERN AUSTRALIAN INSTITUTE OF TECHNOLOGY

All students enrolled in survey disciplines, 30 April 1985

Discipline	Undergraduate				Masters-Coursework				Masters Research & Thesis				Grad. Diploma				*Total Graduates			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Mathematics	103	41	144	28.5									6	3	9	33.3	18	8	26	30.8
Physics	29	5	34	14.7	2	-	2	-	13	1	14	7.1	24	3	27	11.1	8	1	9	11.1
Chemistry	74	32	106	30.2	2	-	2	-	4	-	4	-	13	3	16	18.8	20	5	25	20
Biotechnology	55	96	151	63.6									15	22	37	59.5	10	17	27	63
Computer Science													116	30	146	20.5				
Mining & Minerals Engineering	133	1	134	0.7													18	-	18	-
Metallurgy	62	2	64	3.1					2	1	3	33.3	5	1	6	16.7	11	-	11	-
Minerals Exploration	21	1	22	4.5																
Mining Geology	2	1	3	33.3													1	-	1	-
Building Construction & Civil Engineering	135	3	138	2.2					11	-	11	-	9	-	9	-	31	-	31	-
Geology & Geophysics	102	9	111	8.1													18	-	18	-
Surveying & Mapping	126	6	132	4.5	5	-	5	-					10	1	11	9.1	17	-	17	-
Electrical Engineering	44	1	45	2.2					14	-	14	-	8	-	8	-	13	-	13	-
Electronic & Computer Engineering	285	11	296	3.7													24	1	25	4
Chemical Engineering	45	2	47	4.3					1	-	1	-	14	-	14	-				
Mechanical Engineering	138	4	142	2.8					8	-	8	-					36	1	37	3
Common 1st Year Engineering	273	17	290	5.9																
Multidisciplinary Sc.	110	26	136	19.1																

(Disciplines have been defined according to CTEC Field of Study Classification, Nov. 1985).

* completed courses in 1984. Source: Statistical returns from Institute, 1986.

TABLE 7(a)

UNIVERSITY OF NEW SOUTH WALES

UNDERGRADUATE ENROLMENTS IN SURVEY DISCIPLINES BY YEAR GROUPS AND HONOURS,* 1985

Discipline	Year 1				Year 2				Year 3				Year 4				Total			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Chem Eng.& Indust.Chem.	85	35	120	29.2	87	27	114	23.7	89	29	118	24.6	87	23	110	20.9	348	114	462	24.7
Mining Engineering	19	-	19	-	20	1	21	4.8	38	-	38	-	53	2	55	3.6	130	3	133	2.3
Civil Engineering	103	4	107	3.7	117	10	127	7.9	157	6	163	3.7	125	2	127	1.6	502	22	524	4.2
Ceramic Engineering	18	4	22	18.2	12	2	14	14.3	10	-	10	-	4	1	5	20.0	44	7	51	13.7
Mech.& Indust.Engineer.	94	1	95	1.1	110	2	112	1.8	121	4	125	3.2	144	5	149	3.4	469	12	481	2.5
Elec.Eng. & Computer Sc.	187	12	199	6.0	174	15	189	7.9	145	14	160	8.8	219	16	235	6.8	726	57	783	7.3
Mineral Processing													1	-	1	-	1	-	1	-
Metallurgy	9	1	10	10.0	9	1	10	10.0	7	1	8	12.5	16	1	17	5.9	41	4	45	8.9
Surveying	44	9	53	17.0	52	3	55	5.5	39	2	41	4.9	68	2	70	2.9	203	16	219	7.3
Biomedical Engineering																				

* Potential honours enrolments included in Year 4 and not able to be identified.

Source: Statistical return from University

TABLE 7(b)

THE NEW SOUTH WALES INSTITUTE OF TECHNOLOGY

UNDERGRADUATE ENROLMENTS IN SURVEY DISCIPLINES BY YEAR GROUPS AND HONOURS - 1985

Discipline	Year 1				Year 2				Year 3				Year 4				Total			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Mathematics	55	39	94	41.5	44	14	58	24.1	19	14	33	42.4					118	67	185	36.2
Physics	84	12	96	12.5	93	15	108	13.9	41	5	46	10.9					218	32	250	12.8
Chemistry	58	33	91	36.3	76	51	127	40.2	51	22	73	30.1					185	106	291	36.4
Biomedical Science (a)	31	76	107	71	25	70	95	73.7	34	65	99	65.7					90	211	301	70.1
Biology (b)	32	43	75	57.3	21	14	35	40	17	19	36	52.8					70	76	146	52.1
Computer Science	224	69	293	23.5	163	75	238	31.5	103	27	130	20.8					490	171	661	25.9
Civil Engineering	249	12	261	4.6	158	3	161	1.9	132	1	133	0.8					539	16	555	2.9
Mechanical Engineering	233	5	238	2.1	184	6	190	3.2	200	-	200	-					617	11	628	1.8
Electrical Engineering	283	7	290	2.4	193	9	202	4.5	190	2	192	1.0					666	18	684	2.6
Geology	41	3	44	6.8	33	4	37	10.8	33	4	37	10.8					107	11	118	9.3
Building	123	4	127	3.1	77	-	77	-	54	1	55	1.8					254	5	259	1.9
Quantity Surveying	24	2	26	7.7	27	4	31	12.9	15	-	15	-					66	6	72	8.3
Biochemistry }																				
Biotechnology }																				

Footnotes (a) Includes figures for Biochemistry, Microbiology & Cellular Pathology (Biochem.& Microbiology needed for this study).
(b) Includes figures for Biotechnology & Environmental Biology (Biotechnology figures needed for this study).
(c) Figures in this table are shown as headcount and will therefore not correspond with those on table 6(b).
(d) Figures include all students who are enrolled in courses which fall within these disciplines.

TABLE 7(c)

QUEENSLAND INSTITUTE OF TECHNOLOGY

UNDERGRADUATE ENROLMENTS IN SURVEY DISCIPLINES BY YEAR GROUPS AND HONOURS, 1985

Discipline	Year 1				Year 2				Year 3				Year 4				TOTAL			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Geology	18	3	21	14.3	25	1	26	3.8	25	1	26	3.8					68	5	73	6.8
Chemistry (1)	38	19	57	33.3	44	25	69	36.2	35	6	41	14.6					117	50	167	29.9
Mathematics (2)	28	21	49	42.9	31	19	50	38.0	21	11	32	34.4					80	51	131	38.9
Physics (3)	22	4	26	15.4	11	5	16	31.3	12	-	12	-					45	9	54	16.7
Biochemistry, Micro-biology, Physiology (4)	21	30	51	58.8	32	43	75	57.3	14	22	36	61.1					67	95	162	58.6
Computer Science (5)	117	13	130	10.0	138	14	152	9.2	52	5	57	8.8					307	32	339	9.4
Civil Engineering	82	2	84	2.4					174	4	178	2.2	57	-	57	-	313	6	319	1.9
Electrical Engineering	86	1	87	1.1					207	3	210	1.4	61	-	61	-	354	4	358	1.1
Electronic Systems Eng/Computing	21	3	24	12.5													21	3	24	12.5
Mechanical Engineering	62	-	62	-					124	-	124	-	57	-	57	-	243	-	243	-
Building	36	1	37	2.7	101	-	101	-	28	-	28	-					165	1	166	0.6
Quantity Surveying	20	1	21	4.8	24	1	25	4.0	5	-	5	-					49	2	51	3.9
Surveying	30	1	31	3.2	92	1	93	1.1	27	-	27	-					149	2	151	1.3

(1) Includes B.App.Sc. - Chemistry and B.App.Sc. - Applied Chemistry only.
(2) Includes B.App.Sc. - Mathematics only.
(3) Includes B.App.Sc. - Physics only.
(4) Includes B.App.Sc. - Medical Laboratory Science only.
(5) Includes B.App.Sc. - Computer Science only.

TABLE 7(d)

MONASH UNIVERSITY

Undergraduate enrolments in survey disciplines by year groups and honours, 1985

Discipline	Year 1				Year 2				Year 3				Year 4				Honours				TOTAL			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
*Biochemistry					68	82	150	54.7	48	51	99	51.5					1	6	7	85.7	117	139	256	54.3
*Microbiology					33	41	74	55.4	26	42	68	61.8					5	12	17	70.6	64	95	159	59.7
(a) Chem.Eng.					167	19	186	10.2	31	5	36	13.9	25	3	28	10.7	21	5	26	19.2	244	32	276	11.6
(a) Civil Eng.					88	11	99	11.1	61	3	64	4.7	24	4	28	14.3	31	2	33	6.1	204	20	224	8.9
(a) Elect.Eng.					179	23	202	11.4	70	3	73	4.1	37	1	38	2.6	41	1	42	2.4	327	28	355	7.9
(a) Materials Eng.					99	7	106	6.6	11	7	18	38.9	4	1	5	20.0	5	-	5	-	119	15	134	11.2
(a) Mech. Eng.					163	20	183	10.9	50	4	54	7.4	22	2	24	8.3	30	-	30	-	265	26	291	8.9
* Chemistry	317	266	583	45.6	89	64	153	41.8	55	31	86	36.0					16	15	31	48.4	477	376	853	44.1
* Computer Sc.	158	94	252	37.3	95	37	132	28.0	89	36	125	28.8					15	7	22	31.8	357	174	531	32.8
* Genetics									8	17	25	68.0					3	1	4	25.0	11	18	29	62.1
* Geology	45	18	63	28.6	16	5	21	23.8	18	3	21	14.3					14	3	17	17.6	93	29	122	23.8
* Mathematics	633	470	1103	42.6	164	130	294	44.2	85	79	164	48.2					18	12	30	40.0	900	691	1591	43.4
* Physics	247	72	319	22.6	38	9	47	19.1	19	-	19	-					11	-	11	-	315	81	396	20.5
* Materials Sc.									5	3	8	37.5					2	1	3	33.3	7	4	11	36.4
Meteorology									12	1	13	7.7									12	1	13	7.7

* Honours taken in year 4.

(a) First year Bachelor of Engineering is a composite course common for all disciplines.
As at 30/4/85 265 males, 30 females = total 304 (F% 12.82%).

(b) The figures include all students enrolled in selected subjects. The subjects have been chosen to provide data concerning subjects taken as a major in the discipline concerned.

TABLE 7(e)

ROYAL MELBOURNE INSTITUTE OF TECHNOLOGY

Undergraduate enrolments in survey disciplines by year groups and honours, 1985

Discipline	Year 1				Year 2				Year 3				Year 4				Honours				TOTAL			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Chem.Eng.			40				40				51		25	3	28	10.7	21	5	26	19.2	150	20	170	11.8
Civil & Aeronaut. Engineering			106				114				84								82		360	26	386	6.7
Communic.& Electronic Eng.			169				127				116								107		500	19	519	3.7
Elect.Eng.			63				58				45								37		196	7	203	3.4
Mech.& Production Engineering			85				66				50								63		260	4	264	1.5
Metallurgy & Mining			29				19				33								24		98	7	105	6.7
Geology & Geological Eng.			44				42				41								4		118	13	131	9.9
Chemistry			123				106				71								24		174	150	324	46.3
Physics			136				132				73								1		192	150	342	43.9
Applied Biology			236				232				220										228	460	688	66.9
Mathematics			168				110				58								1		229	108	337	32.0
Surveying			92				75				87										200	54	254	21.3
Computing			182				126				109								1		314	104	418	24.9

Footnote (1) Physics figures include enrolments in the Dept of Applied Physics but exclude paramedical students.
(2) Chemistry, Biology & Biotechnology exclude paramedical students.
(3) Students are not double-counted. Each student is shown in relation to the course in which he or she is enrolled and not for each subject. Thus Chem.Eng. students studying physics are not shown again under physics. Statistics provided are head counts of students enrolled for courses and not subjects.

TABLE 7(f)

SOUTH AUSTRALIAN INSTITUTE OF TECHNOLOGY

UNDERGRADUATE ENROLMENTS IN SURVEY DISCIPLINES BY YEAR GROUPS AND HONOURS 1985

Disciplines	Year 1				Year 2				Year 3				Year 4				TOTAL			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Mechanical Engineering	159	4	163	2.5	77	1	78	1.3	57	-	57	-	41	-	41	-	334	5	339	1.5
Surveying	59	3	62	4.8	34	1	35	2.9	9	-	9	-	14	1	15	6.7	116	5	121	4.1
Cartography	13	3	16	18.8	3	4	7	57.1									16	7	23	30.4
Civil Engineering	69	6	75	8.0	39	1	40	2.5	39	1	40	2.5	27	-	27	-	174	8	182	4.4
Electrical Engineering	49	2	51	3.9	26	3	29	10.3	32	2	34	5.9					119	7	126	5.6
Electronic Engineering	157	8	165	4.8	150	3	153	2.0	55	2	57	3.5	36	-	36	-	398	13	411	3.2
Mining & Metallurgy	52	2	54	3.7	16	1	17	5.9	41	1	42	2.4	45	2	47	4.3	154	6	160	3.8
Chemical Technology *	49	16	65	24.6	37	18	55	32.7	9	7	16	43.8					95	41	136	30.1
Applied Geology	18	2	20	10.0	6	2	8	25.0	7	-	7	-					31	4	35	11.4
Physics	21	1	22	4.5	15	1	16	6.3	12	2	14	14.3					48	4	52	7.7
Computing	290	78	368	21.2	93	31	124	25.0	49	12	61	19.7					432	121	553	21.9
Maths & Computing	5	-	5	-													5	-	5	-

Source: Statistical returns from SAIT.

Notes (1) There is no undergraduate course in maths other than service courses.

* (2) Chemical Technology includes Chemistry, and Chemistry plus Microbiology.

TABLE 8 (aa)

UNIVERSITY OF NEW SOUTH WALES

STUDENTS GRADUATING 1985 BY SEX AND LEVEL

Discipline	Undergraduate				Masters - Coursework				Masters Research & Thesis				Ph.D.				Other Postgraduate			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Physics	18	-	18	-					1	-	1	-	5	-	5	-				
Chemistry	13	14	27	51.9	3	-	3	-	3	1	4	25.0	5	1	6	16.7	3	5	8	62.5
Computing Science	51	34	85	40.0					4	-	4	-	1	-	1	-				
Mathematics	39	24	63	38.1	3	-	3	-					5	-	5	-				
Microbiology	9	17	26	65.4									1	-	1	-				
Biotechnology	-	2	2	100	3	3	6	50.0	3	-	3	-	5	-	5	-				
Biochemistry	13	27	40	67.5					1	1	2	50.0	5	3	8	37.5				

Footnotes Numbers Graduating 1/7/84 - 30/6/85

Disciplines in this Table give no breakdown between Bachelor/Bachelor Honours.

Maths, physics & chemistry exclude medical students and those enrolled in the Faculties of Applied Science and Engineering, ie there is no double counting in this table.

TABLE 8 (ab)

UNIVERSITY OF NEW SOUTH WALES

STUDENTS GRADUATING 1985 BY SEX AND LEVEL

Discipline	Bachelor				Bachelor Honours				Masters Coursework				Masters Research & Thesis				Doctorate			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Chemical Engineering & Industrial Chemistry	19	4	23	17.4	38	5	43	11.6	3	-	3	-	3	-	3	-	4	-	4	-
Mining Engineering	15	-	15	-	28	-	28	-	6	1	7	14.3	9	-	9	-	1	-	1	-
Civil Engineering	42	-	42	-	21	1	22	4.5	60	1	61	1.6	1	-	1	-	5	-	5	-
Ceramic Engineering	1	-	1	-	1	-	1	-												
Mechanical & Industrial Engineering	35	-	35	-	27	-	27	-	16	-	16	-	1	-	1	-	4	-	4	-
Electrical Engineering & Computer Science	6	-	6	-	37	1	38	2.6	15	-	15	-	4	-	4	-	1	-	1	-
Mineral Processing	1	-	1	-																
Nuclear Engineering																	1	-	1	-
Metallurgy	2	-	2	-	4	2	6	33.3	1	-	1	-	1	-	1	-	3	-	3	-
Surveying	24	1	25	4.0	11	-	11	-	5	1	6	16.7								
Biomedical Eng.									4	1	5	20.0								

Footnotes

Numbers Graduating 1985

Maths, physics & chemistry exclude medical students and those enrolled in the Faculties of Applied Science and Engineering. ie there is no double counting in this table.

TABLE 8(b)

THE NEW SOUTH WALES INSTITUTE OF TECHNOLOGY

STUDENTS GRADUATING 1985 BY SEX AND LEVEL (d)

Discipline (e)	Undergraduate				Masters Coursework				Masters Research & Thesis				Bachelors Honours				Other Postgraduate			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Mathematics	10	1	11	9.1	1	-	1	-									1	-	1	-
Physics	16	2	18	11.1					1	-	1	-								
Chemistry	24	11	35	31.4					2	-	2	-								
Biomedical Science (a)	20	63	83	75.9																
Biology (b)	9	10	19	52.6																
Computer Science	83	50	133	37.6	2	-	2	-									9	3	12	25.0
Civil Engineering	62	1	63	1.6																
Mechanical Engineering	88	-	88	-	4	-	4	-	1	-	1	-								
Electrical Engineering	76	-	76	-																
Geology	16	1	17	5.9													1	-	1	-
Building	18	1	19	5.3					1	-	1	-					8	1	9	11.1
Quantity Surveying	7	1	8	12.5																
Biochemistry } (c) Biotechnology }									3	1	4	25.0					1	3	4	75.0

Footnotes (a) Includes figures for Biochemistry, Microbiology & Cellular Pathology (Biochem.& Microbiology needed for this study).
(b) Includes figures for Biotechnology & Environmental Biology (Biotechnology figures needed for this study).
(c) Separate figures given for these 2 disciplines in Postgraduate figures. For U/G grouping see notes (a) & (b).
(d) Figures on this table are shown as Headcount.
(e) Figures include all students who were enrolled in courses which fall within these disciplines and who completed their course in 1984.

TABLE 8(c)

UNIVERSITY OF QUEENSLAND

STUDENTS GRADUATING 1985 BY SEX AND LEVEL

Discipline	Undergraduate				Masters Coursework				Masters Research & Thesis				Ph.D.				Other Post.Grad.			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Chemical Engineering	14	2	16	12.5	1	1	2	50.0	4	-	4	-	1	-	1	-				
Honours	16	3	19	15.8																
Civil Engineering	12	2	14	14.3	2	-	2	-	5	-	5	-	1	-	1	-				
Honours	22	2	24	8.3																
Electrical Engineering	21	2	23	8.7	1	-	1	-	3	-	3	-	1	-	1	-				
Honours	19	2	21	9.5																
Mechanical Engineering	18	-	18	-	1	-	1	-	1	-	1	-	2	-	2	-				
Honours	19	3	22	13.6																
Metallurgical Eng.Honours	1	-	1	-									1	-	1	-				
Mining Engineering	10	-	10	-					1	-	1	-	3	-	3	-				
Honours	15	-	15	-																
Chemistry (a)	24	6.5	30.5	21.3					2	-	2	-	3	1	4	25.0				
Honours	9	3	12	25.0													P/G	Dip.		
Computer Science	39.5	9	48.5	18.6	1	-	1	-					1	-	1	-	15	2	17	11.8
Honours	3	2	5	40.0																
Biochemistry (a)	4.5	17.8	22.3	79.8					1	-	1	-	-	2	2	100				
Honours	4	3	7	42.9																
Biotechnology					-	1	1	100												
Min/Met. Engineering									2	-	2	-								
Geology & Mineralogy	13	3	16	18.8					2	-	2	-	1	-	1	-				
Honours	6	1	7	14.3																

Table 8(c)

Discipline	Undergraduate				Masters Coursework				Masters Research & Thesis				Ph.D.				Other Post.Grad.			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Mathematics (a)	21.5	16	37.5	42.7	4	-	4	-	1	-	1	-	2	-	2	-				
Honours	3	-	3	-																
Microbiology (a)	6	24.5	30.5	80.3					-	1	1	100	3	-	3	-				
Honours	4	6	10	60.0																
Physics (a)	11	3	14	21.4					1	-	1	-	2	-	2	-				
Honours	7	-	7	-																

Footnotes Numbers graduating 1985
(a) Adjusted figure to allow for majors/double majors.

TABLE 8(d)

QUEENSLAND INSTITUTE OF TECHNOLOGY

STUDENTS GRADUATING 1985 BY SEX AND LEVEL

Discipline	Undergraduate				Masters Coursework				Masters Research & Thesis				Bachelors Honours				Other Postgraduate			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Geology	21	2	23	8.7					1	-	1	-								
Chemistry (1)	15	10	25	40.0					1	1	2	50.0								
Mathematics (2)	15	3	18	16.7					2	-	2	-								
Physics (3)	8	-	8	-																
Biochemistry/ Microbiology (4)	16	26	42	61.9																
Computer Science (5)	37	9	46	19.6																
Civil Engineering	33	1	34	2.9					1	-	1	-	3	-	3	-	5	-	5	-
Electrical Engineering	31	-	31	-									10	-	10	-	3	-	3	-
Mechanical Engineering	24	1	25	4.0									10	1	11	9.1				
Surveying	26	-	26	-																
Building	1	-	1	-													1	-	1	-
Quantity Surveying	1	-	1	-																

Footnotes Numbers graduating in 1985 - Course completed 1984.

(1) Includes B.App.Sc. - Chemistry, B.App.Sc. - Applied Chemistry, M.App.Sc. - Research & Thesis.

(2) Includes B.App.Sc. - Mathematics, M.App.Sc. - Research & Thesis.

(3) Includes B.App.Sc. - Physics.

(4) Includes B.App.Sc. - Medical Laboratory Science.

(5) Includes B.App.Sc. - Computer Science.

TABLE 8(e)

MONASH UNIVERSITY

STUDENTS GRADUATING 1985 BY SEX AND LEVEL

Discipline	Undergraduate				Bachelor Honours				*Masters Coursework Research & Thesis				x Ph.D.				TOTAL			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Microbiology	9	8	17	47.1	2	5	7	71.4					4	-	4	-	15	13	28	46.4
Biochemistry	19	43	62	69.4	8	9	17	52.9					6	2	8	25.0	33	54	87	62.1
Mechanical Engineering	22	-	22	-	25	1	26	3.8	1	-	1	-	1	-	1	-	49	1	50	2.0
Electrical Engineering	31	1	32	3.1	27	2	29	6.9	3	-	3	-	1	-	1	-	62	3	65	4.6
Civil Engineering	40	1	41	2.4	35	2	37	5.4	4	1	5	20.0	3	-	3	-	82	4	86	4.7
Chemical Engineering	15	2	17	11.8	9	3	12	25.0	2	2	4	50.0	1	-	1	-	27	7	34	20.6
Materials Eng.Science	9	3	12	25.0	1	-	1	-					-	1	1	100	10	4	14	28.6
Materials Engineering	11	3	14	21.4	1	4	5	80.0					1	-	1	-	13	7	20	35.0
Physics	6	-	6	-	12	-	12	-					2	1	3	33.3	20	1	21	4.8
Meteorology	1	-	1	-			-										1	-	1	-
Mathematics	52	41	93	44.1	13	5	18	27.8	1	-	1	-	6	-	6	-	72	46	118	39.0
Geology	9	5	14	35.7	15	5	20	25.0									24	10	34	29.4
Genetics	8	3	11	27.3	3	10	13	76.9	-	1	1	100					11	14	25	56.0
Computer Science	52	29	81	35.8	14	3	17	17.6	1	-	1	-	1	-	1	-	68	32	100	32.0
Chemistry	42	35	77	45.5	13	19	32	59.4	1	-	1	-	9	1	10	10.0	65	55	120	45.8

Footnotes Numbers graduating in 1985

* Differentiated data for Masters courses not available

x Includes - D.Litt, D.Ed., D.Eng., LL.D., M.D., D.Sc., Ph.D.
Includes all graduates with a major in the discipline concerned.

TABLE 8(f)

ROYAL MELBOURNE INSTITUTE OF TECHNOLOGY

STUDENTS GRADUATING 1985 BY SEX AND LEVEL

Discipline	Undergraduate				Masters Coursework				Masters Research & Thesis				Diploma				Graduate Diploma			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Chemical Engineering	21	2	23	8.7																
Civil & Aeronautical Engineering	61	-	61	-																
Communication & Electronic Eng.	64	2	66	3.0					1	-	1	-					2	-	2	-
Electrical Engineering	26	-	26	-									1	-	1	-				
Mech. & Production Eng.	48	2	50	4.0									1	-	1	-	8	-	8	-
Metallurgy & Mining	9	-	9	-									9	-	9	-				
Geology & Geological Eng.	9	1	10	10.0													-	1	1	100
Chemistry	15	12	27	44.4																
Physics	5	2	7	28.6									10	29	39	74.4	1	4	5	80.0
Applied Biology	20	73	93	78.5									15	23	38	60.5				
Mathematics	14	14	28	50.0									1	-	1	-	3	2	5	40.0
Surveying	31	1	32	3.1																
Computing	46	10	56	17.9									4	1	5	20.0	62	12	74	16.2

Footnote 1984 Course completions

(1) Physics figures include enrolments in the Dept of Applied Physics but exclude paramedical students.

(2) Chemistry, Biology & Biotechnology exclude paramedical students.

(3) Students are not double-counted. Each student is shown in relation to the course in which he or she is enrolled and not for each subject. Thus Chem.Eng. students studying physics are not shown again under physics. Statistics provided are head counts of students enrolled for courses and not subjects.

UNIVERSITY OF ADELAIDE

TABLE 8(g)

STUDENTS GRADUATING IN 1985 BY SEX AND LEVEL

Note: Refers to degrees conferred 1.7.84 to 30.6.85 with the majority being conferred at the annual commemoration ceremonies in April/May 1985, i.e. students usually completed studies December 1984.

Source: University of Adelaide : completed application forms for degree conferral with student record cards.

STUDENTS GRADUATING IN FACULTY OF SCIENCE

Discipline	Bachelor				Bachelor Honours				Masters (Thesis)				Doctorate				Higher Doctorate			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Biochemistry	15	23	38	60.5	7	4	11	36.4					4	2	6	33.3	1	-	1	-
Chemistry	14	10	24	41.7	8	4	12	33.3					1	-	1	-				
Computer Science	9	1	10	10.0																
Genetics	9	7	16	43.8	1	-	1	-					-	1	1	100				
Geology & Geophysics	32	6	38	15.8	16	3	19	15.8	2	-	2	-								
Mathematics	21	8	29	27.6	1	-	1	-												
Microbiol.& Immunology	7	17	24	70.8	2	5	7	71.4					4	1	5	20.0				
Physics	21	5	26	19.2	9	2	11	18.2	1	-	1	-	2	-	2	-				

(i) For the purpose of the WISTA project students have been deemed to have graduated in the specified subject or "majors" if they have passed a relevant third year level subject.

(ii) Undergraduate figures include some double counting. Postgraduate figures are actual students.

(iii) "Chemistry" includes subject offerings of Department of Organic Chemistry and Department of Physical & Inorganic Chemistry.

(iv) "Mathematics" covers subject offerings of Pure Mathematics, Applied Mathematics, Statistics and Mathematical Physics for Faculty of Science students.

(v) As students are generally required to do two third year level subjects, these figures for bachelor degrees cannot be aggregated meaningfully as, for example, students completing a third year level physics subject and a third year level mathematics subject are counted under both. Students completing double majors in the one subject, e.g. Organic Chemistry III and Physical & Inorganic Chemistry III are counted only once under "Chemistry". For information, 201 students graduated B.Sc. in the period.

Table 8(g) - Page 2

STUDENTS GRADUATING IN FACULTY OF MATHEMATICAL SCIENCES

Discipline	Bachelor				Bachelor Honours				Masters (Thesis)				Doctorate				Higher Doctorate			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Mathematics	17	14	31	45.2	27	4	31	12.9	2	-	2	-	3	-	3	-				
Computer Science	8	3	11	27.3	5	3	8	37.5					-	1	1	100				
Maths & Computer Science	56	14	70	20.0																
Computer Science													Postgraduate Diploma							
													17	6	23	26.1				

(vi) For the purpose of WISTA's project a student has been deemed to have graduated in "Mathematics" or "Computer Science" if a third year level Mathematics or Computer Science subject has been passed, i.e. the student would normally have relevant prerequisite first and second year level subjects culminating in a Mathematics or Computer Science "major". "Mathematics" is either Pure Mathematics, Applied Mathematics, Statistics, Mathematical Physics, Commerce II (Mathematical Sciences) or combinations of these. Full details of combinations and options are contained in Calendar Volume II.

(vii) Students passed both a third year level Mathematics subject and a third year level Computer Science subject, i.e. for WISTA's purpose a "major" in each.

STUDENTS GRADUATING IN FACULTY OF ENGINEERING

Discipline	Bachelor				Bachelor Honours				Masters (Thesis)				Doctorate				Higher Doctorate			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Chemical Engineering	5	3	8	37.5	15	3	18	16.7					1	-	1	-				
Civil Engineering	11	1	12	8.3	15	-	15	-					2	-	2	-				
Electrical & Electronic Engineering	28	5	33	15.1	23	-	23	-	2	-	2	-	2	-	2	-				
Mechanical Engineering					19	1	20	5.0	1	-	1	-	1	-	1	-				

Notes:

(viii) A candidate for the Honours degree in Engineering shall complete the final year of the course for the Ordinary degree and, in addition, shall complete an advanced course of lectures, seminars and project work as set out in the syllabuses for one of the Engineering Honours specialities, i.e. no additional year's work necessarily required as for B.Sc.(Hons.).

(ix) Unusual year with no award of bachelor level Mechanical Engineering degrees. In 1984 6 ordinary and 10 honours degrees awarded; in 1983 9 ordinary and 11 honours degrees; all male recipients both years.

TABLE 8(h)

SOUTH AUSTRALIAN INSTITUTE OF TECHNOLOGY

STUDENTS GRADUATING 1985 BY SEX AND LEVEL

Discipline	Associate Diploma				Bachelor				Bachelor Honours				Graduate Diploma				Master (Thesis)			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Civil Engineering	11	-	11	-	11	-	11	-					5	-	5	-				
Mechanical Engineering	13	-	13	-	28	1	29	3.4												
Electrical Engineering					15	-	15	-					5	-	5	-				
Electronic Engineering	13	1	14	7.1	21	-	21	-					7	-	7	-				
Mining & Metallurgy					17	-	17	-												
Chemical Technology (Including Applied Chemistry, Chemistry, Chem./Microbiology)	12	4	16	25.0	12	10	22	45.5												
Applied Geology					4	1	5	20.0					2	-	2	-	1	-	1	-
Surveying	10	-	10	-	2	-	2	-												
Cartography	1	5	6	83.3																
Physics					7	1	8	12.5												
Computing	22	5	27	18.5	24	4	28	14.3												
Maths													1	-	1	-				

Footnotes Numbers graduating 1985.

Physics figures are for the B.App.Science in Applied Physics.

TABLE 8(k)

UNIVERSITY OF WESTERN AUSTRALIA

STUDENTS GRADUATING 1985 BY SEX AND LEVEL

Discipline	Undergraduate				Masters Coursework				Masters Research & Thesis				Ph.D.				Honours			
	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F	M	F	T	%F
Civil Engineering	27	1	28	3.6					1	-	1	-	1	-	1	-	13	-	13	-
Electrical Engineering	17	2	19	10.5									1	-	1	-	22	-	22	-
Electronic Engineering	6	-	6	-	2	-	2	-									6	1	7	14.3
Mechanical Engineering	21	-	21	-	1	-	1	-									11	2	13	15.4
Chemistry	23	16	39	41.0									2	-	2	-	7	4	11	36.4
Computer Science	44	14	58	24.1													4	1	5	20.0
Geology	17	6	23	26.1					2	-	2	-	3	-	3	-	16	2	18	11.1
Mathematics	14	6	20	30.0									1	-	1	-	4	-	4	-
Physics	14	-	14	-													8	1	9	11.1
Biochemistry	11	10	21	47.6													6	4	10	40.0
Microbiology	10	10	20	50.0									2	-	2	-	3	5	8	62.5

Footnotes Numbers graduating in 1985

TABLE 9(a)

1985

Staff profile - all academic staff in the institution by sex and level

UNIVERSITY OF NEW SOUTH WALES

and

NEW SOUTH WALES INSTITUTE OF TECHNOLOGY

	UNIVERSITY OF NEW SOUTH WALES			NSW INSTITUTE OF TECHNOLOGY			
	Total	F	%F.	Total	F	%F	
Professor	130	1	0.8%				
Reader	171	9	5.3%	50	4	8.0%	(a)
Research Equiv.	2	-	-				
Senior Lecturer	454	32	7.0%	86	7	8.1%	(b)
Research Equiv.	7	1	14.3%				
Lecturer	330	66	20.0%	157	25	15.9%	(c)
Research Equiv.	36	10	27.8%				
Senior Tutor				15	7	46.7%	(d)
Tutor	167	62	37.1%	91.2	19.9	21.8%	(e)
Research Equiv.	48	21	43.8%				
TOTAL	1345	202	15.0%	399.2	62.9	15.8%	

Source: Statistical Return from Institutions.

Notes: UNSW

(i) Includes all full-time staff and part-time staff who hold regular appointments which may be expressed in terms of a fraction of a full-time commitment.

(ii) Excludes part-time teaching staff employed on a casual basis.

NSWIT

(a) Above Senior Lecturer.
(b) Senior Lecturer I and II.
(c) Lecturer I and II.
(d) Lecturer III.
(e) Part-time academic staff.

TABLE 9(b)

1985

Staff profile - all academic staff in the institution by sex and level

UNIVERSITY OF QUEENSLAND

and

QUEENSLAND INSTITUTE OF TECHNOLOGY

	UNIVERSITY OF QUEENSLAND			QUEENSLAND INSTITUTE OF TECHNOLOGY		
	T	F	%F	T	F	%F
Professor	99	5	5.1%	7	-	-
Research Equiv.	4	-	-			
Reader	176	8	4.5%	27	3	11.1%
Research Equiv.	7	1	14.3%			
Senior Lecturer	333	26	7.8%	93	6	6.5%
Research Equiv.	32	3	9.4%			
Lecturer	277	70	25.3%	221	44	19.9%
Research Equiv.	38	8	21.1%			
Senior Tutor				4	-	-
Tutor Fulltime	107	60	56.1%	20	11	55.0%
Parttime	299	102	34.1%	687	171	24.9%
Other				17	1	5.9%
Research Junior	16	5	31.2%			
TOTALS	1388	288	20.7%	1076	236	21.9%

Source: Statistical Returns from Institutions.

Note QIT Data includes all fulltime and parttime staff.

TABLE 9(c)

1985

Staff profile - all academic staff in the institution by sex and level

MONASH UNIVERSITY

and

ROYAL MELBOURNE INSTITUTE OF TECHNOLOGY

	E.F.T. MONASH UNIVERSITY			E.F.T. ROYAL MELBOURNE I.T.			
	T	F	%F	T	F	%F	
Professor	98.85	5.55	5.6%				
Reader	113.30	3	2.6%	60	1	1.7%	(a)
Senior Lecturer	341.56	33.23	9.7%	136	13	9.6%	
Lecturer	203.78	48.41	23.8%	316	76	24.1%	
Senior Tutor							
Tutor	172.42	75.09	43.6%				
Other				148.5 (Other teaching staff)	56.7	38.2%	
Research	202.21	100.7	49.8%				
TOTALS	1132.12	265.98	23.5%	660.5	146.7	22.2%	

Source: Statistical Returns from Institutions.

Notes

(1) Monash: Includes all fulltime and parttime staff.

(2) RMIT (a) All academic staff above Senior Lecturer.

TABLE 9(d)

1985

Staff profile - all academic staff in the institution by sex and level

UNIVERSITY OF ADELAIDE

and

SOUTH AUSTRALIAN INSTITUTE OF TECHNOLOGY

	UNIVERSITY OF ADELAIDE		* EFT	SOUTH AUSTRALIAN INSTITUTE OF TECHNOLOGY		
	Total	F	%F	Total	F	%F
Professor of Head of School	70	1	1.4%	22 *	2	9.1%
Reader or equivalent	121	3	2.5%	16 *	1	6.3%
Research equiv.	2	-	-			
Senior Lecturer or equivalent	244.4	20.7	8.5%	112 *	9	8.0%
Research equivalent	8	2	25.0%			
Lecturer/Equivalent	70.5	17.5	24.8%	159	42	26.4%
Research Equivalent	17.4	2.4	13.8%			
Senior Tutor	32 (inc. 7 female Principal Tut.)	16	50.0%			
Tutor	76.6	35.6	46.5%	48 FT 22 PT	19 13	39.6% 59.1%
Research Junior	68	17	25.0%	11 *	-	-
TOTALS	709.9	115.2	16.2%	390	86	22.1%

* EFT figures for University of Adelaide include 24 fractional appointees.

* fulltime

SAIT figures include fulltime, permanent parttime and fractional appointments but exclude temporary staff.

Source: Statistical Return from Institutions.

TABLE 9(e)

1985

Staff profile - all academic staff in the institution by sex and level

UNIVERSITY OF WESTERN AUSTRALIA

and

WESTERN AUSTRALIAN INSTITUTE OF TECHNOLOGY

	UNIVERSITY OF WESTERN AUSTRALIA			WESTERN AUSTRALIAN INSTITUTE OF TECHNOLOGY		
Teaching & Research	T	F	%F	T	F	%F
Professor	70	2.0	2.9%	45	3	6.7%
Reader/Ass.Prof.	88.5	2.0	2.3%	-	-	-
Senior Lecturer	201.1	13.0	6.5%	193	21	10.9%
Lecturer Fulltime	131.8	23.5	17.8%	317	80	25.2%
Snr Tutor Fulltime	77.9	29.4	37.7%	84	48	57.1%
Tutor Fulltime	34.2	12.9	37.7%	29	14	48.3%
Research only						
Ass.Professor	3.0	1.0	33.3%			
Senior Lecturer	10.0	2.0	20.0%			
Lecturer	51.1	11.9	23.3%			
Other	146.5	62.9	42.9%			
Technical						
Fulltime	365.6	104.4	28.6%			
TOTALS	1179.7	265.0	22.5%	668	166	24.9%

Source: Statistical Returns from Institutions.

Notes UWA: Parttime academic staff not included.

EMB/92

UQ WISTA

TABLE 10(a)

MATHEMATICS - GRADE 12, 1985

State	M	F	T	F as % T	Total Students for State
NSW	16,227	16,692	32,919	50.7%	
QLD	13,759	11,818	25,577	46.2 %	20,123
*VIC	10,530	7,568	18,098	41.8%	33,322
SA	4,678	3,176	7,854	40.4%	12,427
WA	6,439	5,635	12,074	46.7%	
	51,633	44,889	96,522	46.5%	

. Females as % total aggregate of all levels of Mathematics students across the five survey States = 46.5%

* Group 1 subjects only – it is from this group that tertiary selection is made. Group 2 is totally school-based and includes Business Mathematics, Commercial Mathematics, Mathematics at Work. Approximately 51% of HSC students studied Group 1 Maths and 7% of students studied Group 2 Maths in 1985.

TASMANIA:

Level II	911	865	1,776	48.7%
Level III	892	505	1,397	36.2%
	1,803	1,370	3,173	43.2%

. Level III subjects comprise the main group used by the University in determining the matriculation status of students.

Source: **Figures supplied by the School Boards of each State.**

State		M	F	T	F as % T
VIC:	Applied Maths	3,052	1,217	4,269	28.5%
	General Maths	4,187	4,724	8,911	53.0%
	Pure Maths	3,291	1,627	4,918	33.1%
		10,530	7,568	18,098	41.8%

- Figures supplied by VCAB.
- Exclude Group 2 Maths (Business Mathematics, Commercial Mathematics, Mathematics at Work).
- The proportion of Mathematics students studying Group 1 Maths in 1985 was 88%.
- Group 2 figures are available from a separate VCAB document authored by Yates and Firkin.

State		M	F	T	F as % T
VIC:	Group 2				
	Business Maths	533	737	1,270	58.0%
	Commercial Maths	106	105	211	49.8%
	Maths at Work	333	403	736	54.8%
		972	1,245	2,217	56.2%

State		M	F	T	F as % T
SA:	Maths IS	1,433	1,581	3,014	52.5%
	Maths I	1,627	798	2,425	32.9%
	Maths II	1,618	797	2,415	33.0%
		4,678	3,176	7,854	40.4%

- Maths I and II are intended to be taken in conjunction and are a necessary background for students intending to study physical sciences, engineering and mathematical sciences. They are viewed as complementary and of the same standard.
- Maths IS is not "social maths". It provides a sound basis for students intending to pursue a course in which mathematics is taken as an ancillary subject rather than as a major subject. It is a subset of Maths I and II and cannot be taken in conjunction with Maths I and II.

State		M	F	T	F as % T
WA:	Maths I	2,604	2,794	5,398	51.8%
	Maths II	1,369	639	2,008	31.8%
	Maths III	1,366	640	2,006	31.9%
	Maths IV	1,100	1,562	2,662	58.7%
		6,439	5,635	12,074	46.7%

- Maths I is suitable for general tertiary entrance. Topics are not in general developed to the level of Maths II and III.
- Maths II and III are designed to be taken in conjunction. They are intended for the more mathematically able student. Maths II is required for Mechanical and Electrical Engineering.
- Maths IV is not designed as preparation for tertiary entrance courses.

EMB/92

UQ WISTA

TABLE 10(b)

NEW SOUTH WALES

CANDIDATES FOR HIGHER SCHOOL CERTIFICATE: MATHS & SCIENCE: 1985

COURSE	M	F	%F	TOTAL
Mathematics Mathematics in Society	4274	5783	57.50	10057
2 UNIT	6756	7782	53.53	14538
3 UNIT	4028	2654	39.72	6682
4 UNIT	1169	473	28.81	1642
Science Multistrand	10	93	90.29	103
Physics 2 UNIT	7005	2546	26.66	9551
Chemistry 2 UNIT	6453	4292	39.94	10745
Biology 2 UNIT	4596	8972	66.13	13568
Geology 2 UNIT	656	258	28.23	914
General Science 2 UNIT	2051	2083	50.38	4134
Industrial Arts				
Indust. Tech. 2 UNIT	1521	90	5.59	1611
Engineering Sc. 2 UNIT	2274	90	3.81	2364
3 UNIT	536	24	4.28	560
Technology 2 Unit 5 (Repeat students only)	9	-	-	9

Source: NSW Board of Senior School Studies

EMB/92

UQ WISTA

TABLE 10(c)

QUEENSLAND

PERCENTAGE OF BOYS & GIRLS TAKING CORE SUBJECTS AT GRADE 12 - 1980, 1986, 1988

	1980		1986		1988	
	M%	F%	M%	F%	M%	F%
English	100	100	100	100	100	100
Maths 1	72.05	48.47	65.49	46.78	63.54	45.15
Maths 2	38.27	12.68	32.80	11.13	31.17	11.10
Chemistry	49.61	26.79	41.35	24.58	39.78	23.22
Physics	46.59	15.67	38.97	12.98	38.40	13.65
Biology	52.58	77.02	50.18	67.42	48.95	62.97
Earth Science	5.91	2.71	4.24	1.23	4.46	1.01
M/Strand Sci	5.22	3.60	12.04	8.77	17.26	12.71
Mod. History	23.83	26.57	20.15	22.93	18.06	22.31
Anc. History	10.74	27.34	9.94	18.84	8.96	17.37
Geography	29.64	28.92	26.43	26.06	24.47	23.10
Graphics	-	-	5.20	0.15	4.63	0.36
Geometric Dr	34.62	0.91	25.74	1.38	22.33	1.55

Based on English numbers (100% of candidates take English) for each of the given years because number of TES recipients prior to 1984 is not available. In 1986, English students equalled 99.4%; in 1988, 98.4%.

Source: Board of Senior Secondary School Studies Publications:

1980: Standardised Mean and Standard Deviation of ASAT by Subject by Sex - 1980.

1986: ASAT Standardised Mean & Standard Deviation of ASAT-O: Subject and Sex 1986.

1988: ASAT Standardised Mean & Standard Deviation by Student Gender and Subject, 1988.

EMB/92

UQ WISTA

TABLE 10(d)

VICTORIA
GRADE 12 HIGHER SCHOOL CERTIFICATE CANDIDATES
GROUP 1 SUBJECTS, 1985

Subject	Number of Candidates Presented			Percentage awarded D Grade or higher	
	M	F	F% of Total	M	F
Applied Maths	3052	1217	28.5	82.5	80.7
General Maths	4187	4724	53.0	78.2	79.8
Pure Maths	3291	1627	33.1	80.9	82.0
Biology	3163	7438	70.2	73.8	75.7
Chemistry	4503	3251	41.9	82.2	81.2
Physical Science	81	70	46.4	87.7	78.6
Physics	4352	1507	25.7	82.5	79.8
Computer Science	565	223	28.3	78.1	64.6
Graphic Communication	703	312	30.7	73.1	68.9
Geological Science	64	102	61.4	73.4	79.4

Source: VISE, Victoria

Notes: (1) A unit is an element of study of approximately 35-40 hours of class time. Units can be studied singly or in combinations, according to the terms of accreditation. A subject consists of three mutually related units or their equivalents.

(2) Group 1 subjects consist of a core of weight-two units and one optional unit related to that core. An optional unit to be studied in conjunction with a particular core must be selected from a set of units accredited for that purpose (ie, Group 1 assessment). In a Group 1 subject, the core is worth 70 per cent and the optional unit 30 per cent of the total possible score.

EMB/92

UQ WISTA

TABLE 10(e)

SOUTH AUSTRALIA
YEAR 12 MATRICULATION CANDIDATES:
MATHS & SCIENCE, 1985

	MALES					
	All presenting Candidates		Presenting Matric. Group		Matriculated	
	No.	%	No.	%	No.	%
Biology (BL)	1589	33.56	1359	33.93	741	31.20
Chemistry (CH)	2000	64.54	1914	64.23	1487	63.01
Geology (GL)	441	59.12	367	58.25	181	60.13
Maths IS (MS)	1433	47.54	1268	46.33	757	42.39
Maths I (MI)	1627	67.09	1571	66.68	1268	65.97
Maths II (M2)	1618	67.00	1571	66.68	1268	65.97
Physics (PC)	2185	70.99	2069	70.25	1575	67.83

	FEMALES					
	All presenting Candidates		Presenting Matric. Group		Matriculated	
	No.	%	No.	%	No.	%
Biology (BL)	3146	66.44	2646	66.07	1634	68.80
Chemistry (CH)	1099	35.46	1066	35.77	873	36.99
Geology (GL)	305	40.88	263	41.75	120	39.87
Maths IS (MS)	1581	52.46	1469	53.67	1029	57.61
Maths I (MI)	798	32.91	785	33.32	654	34.03
Maths II (M2)	797	33.00	785	33.32	654	34.03
Physics (PC)	893	29.01	876	29.75	747	32.17

Source: Senior Secondary Assessment Board of South Australia
Notes: * Matriculation requires 5 subjects to be completed in one examination
* At least one subject must be taken from Group 1 (Arts) and Group 2 (Maths and Science)
* To matriculate, students must achieve a scaled score of not less than 295.

EMB/92

UQ WISTA

TABLE 10(f)

WESTERN AUSTRALIA

CERTIFICATE OF SECONDARY EDUCATION STUDENTS
(YEAR 12 ONLY): MATHS & SCIENCE, 1985

SUBJECT	M	F	T	F %T
Maths I	2604	2794	5398	51.76
Maths II	1369	639	2008	31.82
Maths III	1366	640	2006	31.90
Maths IV	1100	1562	2662	58.67
Biology	1784	2432	4216	57.68
Chemistry	2165	1397	3562	39.22
Geology	145	17	162	10.49
Human Biology	1246	3194	4440	71.94
Physical Science	431	334	765	43.66
Physics	2296	1078	3374	31.95
App. Technology	198	6	204	2.94
*Science	56	45	101	44.55
*General Computing	135	76	211	36.02

* Non-TAE subjects. The results in these subjects do not count towards the tertiary admissions aggregates.

(1) The CSE grades for Tertiary Admission Examination subjects were based on a combination of school assessment and examination score. The CSE grades fro non-TAE subjects were either based on school assessments only or a combination of school assessment and moderating test scores.

(2) The CSE reports ten grades of achievement in each subject. Student results are therefore awarded as closely as possible to the following: the top 10% of students in each subject are awarded "1", the next 10% "2", the next 10% "3", the next 10% "4", the next 10% "5", the next 10% "6", the next 10% "7", the next 10% "8", the next 10% "9", and the remaining 10% "10" or "No Award". Decile grades were not used for tertiary entrance up to and including 1985.

EMB/92

UQ WISTA

TABLE 10(g)

TASMANIA
GRADE 12 CANDIDATES FOR HIGHER SCHOOL CERTIFICATE:
MATHS & SCIENCE, 1985

		FEMALES		MALES	
		TOTAL	% OF T	TOTAL	% OF T
Biology	Level II	201	64.83	109	35.16
	Level III A	896	65.35	475	34.64
	B	128	60.95	82	39.04
Chemistry	Level II	60	40.54	88	59.46
	Level III A	291	37.84	478	62.15
	B	57	29.84	134	70.15
Computer Studies	Level II	249	42.42	338	57.58
	Level III	209	28.95	513	71.05
Geology	Level II	3	12.0	22	88.0
	Level III	103	31.98	219	68.01
General Maths	Level II	481	50.95	463	49.04
Mathematics	Level II	315	46.18	367	53.81
	Level III	451	39.66	686	60.33
Mathematic.Studies	Level II	69	46.0	81	54.0
Algebra & Geometry	Level III	18	18.56	79	81.44
Analysis & Stats.	Level III	36	22.08	127	77.92
Physics	Level II	32	18.71	139	81.28
	Level III A	185	24.76	562	75.23
	B	6	4.65	123	95.35
Science	Level II	56	49.56	57	50.44
Applied Science	Level II	16	28.57	40	20.0
Technology	Level II	22	19.47	91	80.53
Information Tech.	Level II	61	61.0	39	39.0

Source: Schools Board of Tasmania

Note: Level III subjects comprise the main group used by the University in determining the matriculation status of students. Matriculation requirements: a total of 6 subjects taken over no more than two years, with a minimum of four passes in Level III subjects; a maximum of two of the six subjects required can be Level II subjects.

EMB/92

UQ WISTA

TABLE 10(h)

SECONDARY GRADE 12 CANDIDATES - 1985

AUSTRALIAN CAPITAL TERRITORY

**TES QUALIFIED CANDIDATES -
PERCENTAGE TAKING SELECTED SUBJECTS BY SEX
(EXCLUDING MATURE AGE CANDIDATES)**

	Percentages		
	Female	Male	Total
English	95.7	95.5	95.6
Maths 1	50.0	63.8	56.4
Maths 2	38.9	28.5	34.1
Maths 3	7.2	4.2	5.8
Computing Studies	14.2	39.9	26.1
Physics	19.3	45.5	31.5
Physical Science	5.3	5.9	5.6
Chemistry	31.9	36.4	34.0
Physics/Electronics	0.0	0.6	0.3
Electronics	0.1	5.3	2.5
General Biology	20.1	14.2	17.3
Human Biology	22.8	8.5	16.2
Web of Life	6.0	2.4	4.3
Environmental Studies	2.0	2.4	2.2
Agriculture	2.3	2.5	2.4
Geology	0.5	1.6	1.0
Earth Science	1.1	2.8	1.9
Oceanography	0.3	0.9	0.6
General Science	2.5	2.2	2.4
Applied Science	0.0	0.8	0.4
Multidisciplinary Science	4.0	0.1	2.2
Tech Drawing	1.2	6.9	3.8
Technology	0.5	8.1	4.1
Motor, wood, metal & plastic technology	0.2	8.5	4.4

Source: ACT - Year 12 Study 1985
Table 14.3 pp.165-7.

EMB/92

UQ WISTA

TABLE 10(k)

SECONDARY GRADE 12 CANDIDATES: 1985

AUSTRALIAN CAPITAL TERRITORY
MATHEMATICS

		Female	Male	Total	Girls as % of Total
Maths 1	MIN	95	59	154	61.6
	MAJ	379	371	750	50.5
	M + M	83	162	245	33.9
	DM	78	131	209	37.3
	Total	635	723	1358	46.7
Maths 2	MIN	92	80	172	53.5
	MAJ	461	372	833	55.3
	Total	553	452	1005	55.0
Maths 3	MIN	109	90	199	54.8
	MAJ	192	224	416	46.2
	Total	301	314	615	48.9

Source: ACT Schools Authority Year 12 Study 1985
Table 14.1